REMODELER'S

ESTIMATING CHECKLIST

BY ART PRINDLE

THIS LIST OF TROUBLE SPOTS WILL HELP YOU AVOID OMISSIONS AND OVERSIGHTS IN YOUR ESTIMATES

Missing one or more major details on an estimate can quickly eat up your profit. To prevent omissions, you can spend long hours analyzing the plans, but it may not be worth the time if you are one of five bidders. To help me attend to all details without getting bogged down by them, I've developed a checklist of items that I use to logically work through an estimate. Some items on the list don't apply to every job, but it's important to get into the habit of looking at everything.

The organization of the list roughly follows the order of construction, and is similar to the way estimating books and software are organized. Through a process of trial and error, I've tailored the list to fit my area, the local building codes, and my subcontractors. It hasn't been easy, but taking notes during each job helps prevent mishaps on the next estimate.

✓ Plans and Permits

Each building department in the area has its own way of calculating permit fees, which are loosely based on the total cost of the project. On large projects I guess high and place that number in the allowance column. On smaller projects, I try to be more accurate and include the cost in the base price.

Water, sewer, and sidewalk upgrades can be costly and are often required with larger-scale remodels, but may not be indicated on the plans. I always check with the building department to see if they will require these upgrades.

✓ Demolition

Tearing out old work to make way for new work needs to be priced carefully or you'll bust your budget before the job begins.

Slab thickness can make a big difference. More than once, a slab I assumed was 4 inches thick turned out to be twice that — and it took twice as long to break out and produced twice as much rubble. When I can't determine the thickness before doing the estimate, I specify that the price assumes a 4-inch-thick slab and that demolishing a thicker slab will be billed as an extra.

Concrete reinforced with wire mesh and rebar can also take two to three times longer to break out than regular concrete.

Multilayer roofing — wood shingles, for example, with two layers of composition shingle on top — will take almost twice as long to tear off as a single-layer roof. Disposal costs will also be higher. The only way to be sure is to inspect the site.

Tipping fees and container rental can cost $60 or more per day and over $500 to empty. Hauling our own debris to the dump isn't any cheaper. For estimating purposes, I include the cost of a disposal box because it's easier than calculating

Removing mortar-base tile *takes more time than stripping tile from drywall.*

the time for laborers to haul trash to the dump.

Asbestos removal requires a special license in California. If there's asbestos on the job, I get a price from an asbestos contractor for removing the visible asbestos. I also specify that if concealed asbestos is discovered during demolition, it will be removed at additional cost.

Stumps, landscaping, and sprinklers may need to be moved to make way for construction.

Restricted access may prevent you from pulling a truck up close to remove debris or deliver materials.

Mortar-base tile floors and walls can take five times longer to remove than tile on drywall.

Skilled carpenters may have to perform some demolition, such as salvaging window and door casings and breaking out stucco near an electric meter.

☑ Excavation and Foundation

Accurately calculating volume is the critical factor in estimating earth work. This is especially true on sloped sites, which usually require removing more dirt to make room for the new foundation. If the grade is high enough, you might also need to build retaining walls.

Deep piers are becoming more common in areas with poor soil conditions, and need to be handled case by case. If access is limited and a rig can't drive up to the location, add the expense of a special crane auger.

Hand excavating under an existing building is also very costly. The loose dirt also has to be dragged by bucket to a truck or disposal box.

Sewer line trench depth can be deceiving unless you take a peek in the crawlspace to check the elevation of the existing pipes. A pipe that is already underground at the house will be several feet deeper at the street than one that is above grade under the house. Count on between 1/16-inch and 1/4-inch fall per foot.

Doweling into an existing foundation always adds cost.

Surface prep at joints between existing and new concrete may require hand work with a rotary hammer, adding to labor costs.

Waterproofing may be needed for areas exposed to the weather following demolition.

Sawing concrete — either a slab or a stem wall foundation — almost always requires an outside contractor with a diamond blade.

Reinforcing bars required in both directions can bump up the cost of the foundation.

Tall stem walls require extensive bracing.

Special flashings where concrete meets wood — especially if it involves hot-mopping or kerfing a slab — can be expensive, and may require getting a price from a subcontractor.

If you need to saw concrete*, include the costs of a specialty subcontractor.*

☑ Framing

On many bids, I spend over half my time analyzing the framing, which often makes up 25% or more of the total cost of the job. Because remodels have many costly complications that you won't find on the plans, I always schedule a walk-through of the site. Here's a list of what we look for.

Bolting ledgers to concrete requires more labor than a standard platform framing system.

Two-by-six and 2x8 decking on the roof and floor take about five times longer to install than plywood, and the materials are more expensive.

Long joist spans require multiple rows of blocking, which take almost as much time to install as the joists themselves.

Second-floor beams sometimes require custom-made templates for bearing plates, and extra labor to fit the beams to the hardware.

An out-of-level floor is difficult to match without running strings and using the transit, both of which add to labor costs.

Custom-cutting studs is more expensive than using precuts.

Balloon framing is more difficult to lay out, and the tall balloon-framed walls are awkward to handle, particularly on cramped sites. The same is true of gable-end walls.

Rough-cut stud walls may need furring strips to match the new construction.

A chopped-up floor plan, or one with lots of corners and 45-degree angles, always takes more time to lay out and build than an open plan with square corners.

Tall wood-framed chimneys are awkward to frame and difficult to lift into place, especially on a second story.

Shear walls are labor intensive, especially interior shear walls that need to be bolted to the foundation and tied in to the roof framing.

Steep roof slopes (7/12 or more) require ropes and scaffolds for nailing on the sheathing.

Hips and valleys use more material and labor than gable roofs.

Large roof beams are expensive to purchase and transport, and require lots of labor to lift into place. You may need a crane as well.

Deep soffits and one-of-a-kind eaves details are more expensive than standard details.

Venting a cathedral ceiling adds material and labor to maintain a continuous air space, and often requires more expensive rigid insulation.

Fly rafters, whether simple or complex, sometimes get forgotten in the estimate.

☑ Exterior Finish

Estimating stucco is easy — we use a square-foot price — except for special projections or coving. But estimating wood siding is complex.

Matching existing siding often entails extra cost for special milling. On the labor side, weaving the new siding at a transition to the existing takes much more time than applying field pieces.

Matching trim details is often more costly than it first appears. Sometimes, for example, we will need to build a redwood sill for an aluminum window to make it match the existing windows.

Siding gable walls takes longer, especially with horizontal siding, because of the long angle cuts.

☑ Windows

Retrofitting windows takes more time than installing windows in new construction because of time-consuming details like modifying casings to cover gaps in existing drywall. I ask my window supplier to look over the plans to make sure everything will fit, and to make sure every bedroom window meets egress requirements.

Special windows. In my experience, almost any size window can be installed in a new rough opening in 30 minutes, though there are a few exceptions. Allow extra time for tall stairwell windows (over 8 feet) or second-story windows with only ladder or scaffold access. I always get a price on glass block windows from our tile subcontractor.

Matching trim. Be sure to examine both the exterior and interior wood trim details required to match the existing. On the interior, wide stain-grade casings can cost several times more than stock beveled casings.

New openings. Cutting or changing a rough opening in an existing wall may require new headers. Also, plumbing and wiring in the wall may have to be rerouted.

Skylight framing and flashing can be costly. Skylights in an attic roof almost always need a flared shaft, which is more expensive to frame than a skylight in a cathedral ceiling. I trust the roofer to correctly flash a standard curbed skylight, but with a highly engineered skylight, such as a *Velux*, I price the time of a skilled carpenter to make sure it is done properly.

☑ Doors

Most prehung doors — both interior and exterior — take less than an hour to install, assuming the rough opening is correct. Sliding glass doors, French doors, and pocket doors are exceptions, and need two to three hours to install properly. Double pocket doors are the worst, and can easily take all day.

Stain-grade doors and trim are more expensive than paint grade.

Fire doors are much more expensive to purchase and install than standard doors.

Front entrance doors are usually more expensive than other exterior doors. If we're unsure, we include an allowance price.

Locksets and other door hardware are often not specified, so it's easy to forget to include their cost. We use an allowance of $250 for an entry latch and deadbolt, and $20 for each interior door.

☑ Plumbing

Examining the existing plumbing materials is critical when estimating the cost of new plumbing work. Copper is the easiest material to work with,

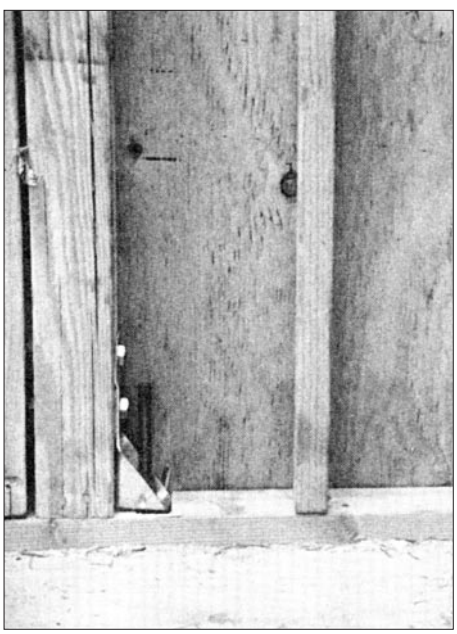

Figure on extra labor *to bolt shear walls to the foundation.*

Roofs with hips and valleys *are more expensive to frame and finish than gable roofs.*

while galvanized pipe requires special connectors and may be old and failing at the joints. For DWV systems, cast-iron pipe with packed lead joints is more difficult to cut in place and is susceptible to rust damage. ABS pipe is much easier to work with.

Second-floor waste lines for new fixtures sometimes interfere with existing floor joists. We always trace the path of the upstairs waste line and add some time to deal with working the framing around the plumbing.

Difficult venting situations, like sinks under windows or in an island, are costly, as are vents in cathedral ceilings or ceilings without an attic.

A new water heater location may require moving the existing hot water line, and instant water heaters may need recirculating pumps.

Appliance and fixture allowances are easy to overlook.

☑ Electrical

With few exceptions, electrical work is predictable. Homes with 2x tongue-and-groove decking systems, however, often make it slow and cumbersome to run Romex: It requires more drilling and more material when you have to pull wire long distances through walls or under floors rather than across a ceiling.

Knob-and-tube wiring is usually cheaper to replace than to trace and tie into.

Recessed can lights may conflict with existing framing.

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Tall windows and complex window walls *are much costlier to install than standard units.*

Fishing wire through existing finish walls is more expensive than wiring in new construction.

A meter upgrade required to boost available amperage is a big-ticket item that is often not indicated on the plans.

☑ Mechanical

To estimate mechanical work, the most important factor is the condition of existing systems.

Planning ductwork runs for forced-air furnaces — both supply runs and cold return ducts — can take a lot of head scratching and framing modification.

Existing ducts held together with brittle duct tape will probably have to be replaced.

Range hoods and downdraft cooktops can take a long time to rough in, especially if the ductwork has to snake through a wall.

Bath fans in 2x roof decking sometimes need a curb to enclose the duct.

Existing gas lines often need to be replaced with new 3/4-inch pipe back to the gas meter. And don't forget to check the supply lines for a gas fireplace log starter.

☑ Insulation

My insulation subcontractor checks the plans against code for wall, floor, and ceiling insulation requirements, but I like to double-check. A cathedral ceiling is the most difficult to estimate because of the expense of buying and installing rigid insulation.

Sound insulation around bathrooms, bedrooms, and between the first and second floors is easy to forget while estimating.

Insulating wide joist bays, such as in a deck-and-girder floor system, makes suspending fiberglass blankets very difficult.

☑ Interior Wall Finishes

For larger drywall jobs, I always have a subcontractor look at the plans to give me a price, but I also like to have them visit the site, especially if the floor plan is all chopped up. On smaller jobs, wall finishes can be a real profit eater if you don't learn to keep your eyes open for the following:

Adding smooth-surfaced walls to a room with textured walls requires floating a new layer of mud over everything — it's almost impossible to get a smooth finish on a painted textured wall by sanding alone.

Rounded corners are more expensive to tape.

Taping skylight shafts costs $150 to $200 extra for each shaft.

Twenty-four-inch-on-center framing may need 5/8-inch drywall to reduce waviness.

Garage walls require fire code drywall.

☑ Cabinets and Countertops

If there is one area that needs an allowance, this is it. Plans rarely contain enough cabinet details to accurately estimate, so I make up my own specifications. For high-end work, I get a quote from a cabinetmaker. For more economical kitchens, I price manufactured cabinets at home-improvement warehouses. I always include extra time to install these cabinets because they usually have to be modified to fit, and parts are often missing. I also allow extra time to install special accessories, like pantry storage systems.

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To blend patched hardwood flooring*, you may need to sand and refinish the whole room.*

A built-in soffit over wall cabinets is easy to overlook.

Countertops — tile, plastic laminate, and solid surfacing — vary greatly in price.

Backsplash height and material makes a big difference in the cost of installation.

Toe-kick trim may need to be custom milled.

☑ Floor Covering

I usually plan on replacing 25% to 50% more hardwood than would ordinarily be required. As an alternative, I plan on refinishing the entire room. Refinishing everything is also the best way — although not the cheapest — to blend new and old flooring.

Hardwood species can make a difference in price — white oak is more expensive, for example, than red oak.

Borders and inlays are labor intensive.

Coved linoleum requires a larger sheet and better craftsmanship to install properly.

☑ Painting

Painting can make up as much as 10% of the total cost of the job — and it doesn't pay to cut corners.

More than two colors — whether it's on the interior or exterior — increase costs because of all the cutting-in that needs to be done.

Prepainted gutters are cheaper than painting raw metal.

Preprimed siding is cheaper than back-priming raw wood.

Painting closet shelves is easy to forget when you're doing the estimate.

Repainting an entire wall or ceiling is usually necessary if any part of it needs painting. Sometimes an entire room needs repainting.

Special trims, moldings, and baseboards — especially in more than one color — can add cost to the painting estimate. ■

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