

# Change Orders For Design/Builders

by Michael McCutcheon

**Careful planning, good communication, and standardized forms are the keys to this change-order system**

Change orders are one of the messiest areas in all of construction. They can be financial and scheduling disasters, and are also a common area of litigation between builders and owners. I've learned from hard experience that without some kind of change-order system, you'll end up working for free (see "Learning the Hard Way," page 36). Every builder should develop a system to overcome the obstacles posed by change orders and turn them into profit and referral-making opportunities.

I'm a design/builder, and I've refined my change-order system to fit the way I do business. The guiding principles are to minimize the number of change orders by planning carefully in the design stage, and then handling any changes that do come up with standardized procedures and forms.

## Plan Ahead

In general, my advice is to try to avoid change orders if you can. For one thing, they take a lot of time to estimate. You have to talk to the owner and architect, as well as your fore-

man, suppliers, and subs. Then you must find the time to calculate the costs, write the change order, check it, give it to the owners, get their reaction, and make any revisions. If it's accepted, you must communicate it carefully to your field people, order any required materials, and reschedule your subs. All in all, it's a big headache with a small financial reward.

Change orders also goof up your schedule. And even the smallest change becomes critical because of the increased attention from the owners. It's important to perform change-order work carefully and on time because it will probably receive more scrutiny than the rest of the work.

Consequently, the best case is to have no change orders at all, and my company does several things to avoid them. First of all, we work on a design/build basis whenever possible. This allows us to prepare our own plans using either an in-house designer or an independent architect. In

design/build work, we get to go over the job carefully with the owner during the design phase to make sure everything we can anticipate beforehand is included in the original plan.

Even when the owners want to use their own architect, we get involved in the design process as early as possible. Often, we prepare a budget in conjunction with the architect before plans are drawn, participate in design meetings, and estimate schematic drawings.

But regardless of who develops the design, we insist that the owners purchase complete plans and specs. There is no excuse for a lack of detail in the construction documents, even on design/build projects. The more detail there is in the final drawings and specs, the better we can streamline communication for the whole course of the job. The owners, our employees, and our subs all have a much better idea of exactly what we've agreed to build. And if there is a problem later, we can refer to the plans to decide whether or not the resolution requires a change order.

Another way we minimize change orders is by holding a preconstruction conference with the job foreman, the designer, and the owners. This is typically done the week before the job is scheduled to start. The meeting gives us a chance to go over the scope of the project and to identify any gross misunderstandings before work begins. Sometimes the owners will even tell us at this meeting about extras they are already contemplating.

Finally, we have found that the jobs with the fewest change orders have been those during which the owner was out of town. Owners virtually never make changes when they are out of town, although there are exceptions. On a recent job, the owners called from Europe because they realized in the middle of their trip that they wanted an extra hose bibb on their new deck. I can only imagine what it would have been like had they been at home.

Of course, sometimes changes are inevitable, such as unanticipated termite work or demands made by the inspector. That's why communication between the job site and

## CHANGE ORDER

**Date:** 12/9/91

### Description of Change:

Provide a Velux TPS-4 skylight in the Master Bedroom. This includes framing the opening, patching the roofing and finish materials to match existing, and all labor to supervise and install.

### Contract Price Change:

|                 |      |         |       |      |
|-----------------|------|---------|-------|------|
| Principal       | 1.0  | hours @ | \$ 60 | \$60 |
| Project Manager | 1.0  | hours @ | 48    | 48   |
| Administration  | 0.5  | hours @ | 30    | 15   |
| Foreman         | 12.0 | hours @ | 39    | 468  |
| Carpenter       | 0.0  | hours @ | 35    | 0    |
| Laborer         | 4.0  | hours @ | 25    | 100  |

|                              |       |
|------------------------------|-------|
| Velux TPS-4, type-L flashing | \$495 |
| Roofing, drywall, painting   | 50    |

|                         |               |
|-------------------------|---------------|
| <b>Subtotal</b>         | <b>\$1275</b> |
| <b>Contingency (5%)</b> | <b>64</b>     |

|                                     |               |
|-------------------------------------|---------------|
| <b>Adjustment to Target</b>         | <b>\$1339</b> |
| <b>Adjustment to Maximum (+10%)</b> | <b>\$1473</b> |

### Contract Time Change

|                                            |               |
|--------------------------------------------|---------------|
| Current Completion Date:                   | 2/28/92       |
| Additional calendar days caused by change: | 2             |
| <b>New Completion Date:</b>                | <b>3/3/92</b> |

### Schedule for execution of the Change Order:

This work will begin as soon as approved by the Owner

**Please notify our office immediately if you have any questions about this change order.**

Michael McCutcheon  
McCutcheon Construction, Inc.  
1280 Sixth Street  
Berkeley, CA 94710  
525-7041

\_\_\_\_\_  
(Owner's signature)

\_\_\_\_\_  
(Date of acceptance)

**Figure 1.** A standard change-order form speeds the process and keeps the job moving. A detailed breakdown of costs for the changes will minimize the owner's questions and promote good will.

our office is important. Our foremen constantly monitor the job for possible change orders, even though they don't make changes without office approval. To help them do this, we make sure they have not only a set of plans, but a copy of the contract and final budget, so they can determine when any legitimate changes arise.

### Let Owners Lead the Way

It is tempting to use change orders to try to make up for a low initial bid. One local contractor has the reputation of insisting that his foremen come up with change orders amounting to at least 10% of the bid price so he can recover profit given away in his lowball bid. In my view, change orders that are not initiated by the owners can very quickly become annoying to them.

There's usually no controversy when the owners initiate a change. For this reason, we try not to approach the owners for those "nickel and dime" changes that occasionally crop up over the normal course of a job. Why bother them for small changes that they haven't requested? This may sound risky, but it works for us because, on most of our jobs, we bill for time and materials up to a guaranteed maximum. In return for the security of this cap, the owner agrees to pay us half of any savings below a "target" price, which is about 10% below the maximum. That way, when a job goes very well, we get a bonus. This happens on about one-third of our jobs and helps balance the few that go over the maximum. We prefer to work this way because it provides the owners with a cap, but allows for the uncertainties involved in remodeling. Since the target price includes a 5% contingency on top of our tight estimated price, we have built-in flexibility that allows us to deal with minor surprises without hounding the owner for a change order.

Consequently, most change orders

we write are for work requested by the owners that changes the scope of the project. For example, people often decide in the middle of a remodeling job to add a skylight. This is substantial enough to warrant a change order, which, when handled properly, can be lucrative (see Figure 1, previous page).

When the owner asks for a major increase in the scope of the job, we prefer to write a separate contract rather than a change order. For example, we currently have a \$45,000 project to which the owner wants to add over \$20,000 worth of work. We have told him we will do the additional work only with detailed plans and a separate budget, contract, and schedule. This protects us both from getting in over our heads.

### Figuring A Change

We price change orders fairly, and apply the same markup to them as to the rest of the job. We figure them as quickly as possible so things keep rolling. As soon as one of our foremen discovers a need to change the work, he notifies the office. Then, we review the contract and estimate to verify that this work is indeed a change. If it is, we find out from the foreman how many man-hours and what materials the change requires, and get prices from any subs involved. Finally, we enter all of this information on a template in the computer.

To avoid problems, all changes should be authorized in writing, but sometimes it is just not possible to have a piece of paper prepared and signed before the change must be made. Recently, we had an owner who wanted to add some lights, but did not decide this until the electrician was at the site and almost finished with the rough wiring. In cases like this, I will accept a verbal agreement after I have worked it out on paper. This helps keep the job on schedule. I still confirm the change in

### ARTICLE 10 — CHANGES IN THE WORK

**10.1** Changes in the Work must be agreed to in writing by both parties. The amount for such extra work shall be determined in advance, if possible, with the Contract Time, Project Target, and Project Maximum adjusted accordingly.

**10.2** Any changes, alterations, additions to or omissions from the drawings and specifications that may be required by any public body, utility, or inspector shall constitute a change in the Work and shall be paid for in the same manner as any other change in the Work.

*Figure 2. Specific provisions for change orders should be included in every contract. Be sure your attorney prepares or reviews the language before you use it.*

writing as soon as possible.

### Change-Order Form

Usually change orders involve an increase in price, but sometimes they involve a credit, as when the owners decide to take carpeting out of the contract and handle it themselves. Either way, we use the same form.

Our change orders include:

- a detailed description of the change
- the estimate breakdown
- markup
- the effect on the schedule
- the date the change order will take effect
- a request for the owners to contact us immediately with questions

Our estimate breakdown includes labor, material, and subcontractor costs. And because change orders often require preparation time in the office and additional supervision in the field, we also include any extra administrative time.

Our markup for change orders is the same as for the rest of the job, and we make sure the owner understands this from the outset. It promotes careful planning, discourages frivolous change requests, and ensures that the effort required to make changes is well-compensated. The markup is included for both decreases and increases in the cost of the job as a result of the change.

It's particularly important to remember that a change order affects not only the price of the job, but also the time to complete. Your change-order form must have a provision for adjusting the contract time.

### The Bad News

This system has some shortcomings. For one thing, it doesn't work as well with fixed price contracts, which aren't as flexible as cost-plus agreements. Nor is it well-suited to competitive bidding, where the builder has virtually no participation in or control over the design.

Another problem, which is not unique to this system, is that it assumes the owner is honest, reasonable, and fair. Unfortunately, as we all know, not everyone has these attributes. To guard against this, we include specific language in our contracts to deal with change orders (Figure 2). For example, the contract specifies that any change required by a building inspector constitutes an automatic change order. Of course, we try to minimize this sort of thing

in the design stage, but when something slips through the cracks, we're covered.

Occasionally, we work with customers who nitpick and won't allow even an obvious change order. One customer was so tough that he would not allow me to write a change order for work demanded by the inspector. He refused to pay, even though it was clearly an automatic change order in our contract. This left us with the difficult choice of either completing the job under unfair circumstances or leaving it halfway. In such cases, I make peace with myself. I know the only way I can be happy is to do the "right" thing even if it costs me some money. So I complete the job and collect as much money as I can.

### The Good News

There are several advantages to my approach to change orders. I believe the system is partly responsible for the fact that, while completing over \$5 million of work in the last eleven years, I have never had a lawsuit, and have incurred only \$3,000 of bad debt. My system allows me to execute required changes quickly, and get on with the job. And the equitable handling of changes relaxes the client, shortens the punchlist, and reduces callbacks.

It also encourages referrals and repeat business. We recently finished a major second-story addition for some people who had heard so many horror stories about remodeling that they dreaded what might happen to them. We worked out a design/build agreement, including an independent architect, and came in ahead of time and under budget. Not only were they delighted with the job, they added about \$20,000 in upgrades to enhance the project. This was a case when owner-initiated change orders made the owners happy and allowed us a fair profit.

Changes from the original contract are an opportunity to demonstrate your business ethics, impress your clients with your thoughtfulness and concern, keep your jobs rolling, and make some money in the bargain. Develop a system that works for you and continue to refine it, and you will have solved one of the toughest problems in construction management. ■

*Michael McCutcheon is a design/build contractor in Berkeley, Calif. He does mostly remodeling work, and some new construction.*

## Learning the Hard Way

In 1983, I did my first large job, an extensive remodel and addition in Oakland for very wealthy clients. Because they liked to fly into town (in their own jet) to spend an occasional day or two in San Francisco, they wanted to upgrade their Oakland home.

Naturally, I was excited by the job and the prospect of working with people for whom cost would be no object. Well, I learned that some people have more savvy about money than I do. I got a big-league education from these people about change orders.

They started off wanting the addition and remodel — perhaps \$50,000 worth of work at the time. But soon they started asking me for "favors." Would I mind coordinating the

installation of the carpet they were picking out at the design center in San Francisco? And could I help them replace the roofing on the existing house? After all, we already had a roofer at the site. By the time all was said and done, we had performed over \$20,000 of extras, for which I never charged them any fee. We did it all at cost.

When I added up the damage at the end of the job and it finally hit me what had happened, I vowed never again to let being a "nice guy" prevent me from charging a reasonable fee for extras. The kicker was that these people knowingly manipulated me into saving them thousands of dollars in legitimate supervision fees, and never even said thank you.

— M. M.