## Working with

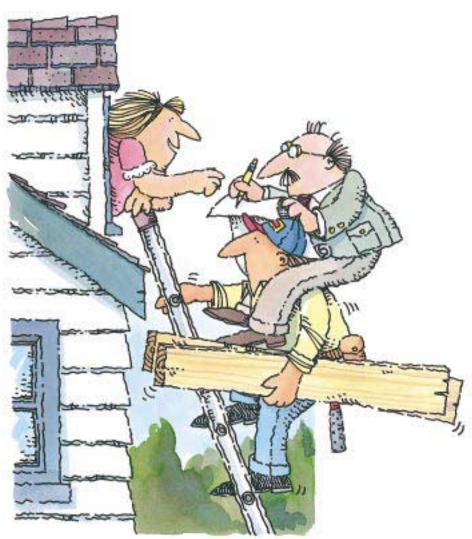
# **ARCHITECTS**

### by David Frane

To avoid confrontation and delays, study the plans, ask questions, and leave design to the architect

If you're like many builders, you're accustomed to working directly with your customers. You have input into what you build and complete control over how you build it. But add an architect to the picture, and three's a crowd. Many builders are uncomfortable solving problems or correcting omissions and oversights by committee. Many have difficulty interpreting the intent of a design with which they have not been involved from the beginning.

In my experience as a carpenter, foreman, and project manager on architect-designed projects, I've grown accustomed to working on projects where the client hires an architect to design the building and a general contractor to build it. My initial assumptions about working with an architect, however, proved to be unrealistic. An architect doesn't hand you a set of perfect prints and then disappear; he or



ILLUSTRATIONS BY DAN DRABEK

she is involved with the project from beginning to end. Here are some of the adjustments you'll need to make to succeed as one corner of the ownerarchitect-builder triangle.

#### Letting Go of Design

A builder's job is to build what the architect designs, and the only people who have to like the way something looks are the architect and his or her client. But I have supervised many car-

penters who have had a hard time letting go of design. No matter how much time we spent talking about what had to be done, they always made a few changes. When I asked, "Why is this different from the drawing?" the answer usually was "It looks better this way," or "It was easier," or "I always do it this way." This type of behavior doesn't play well with architects.

And it gets even worse if you or someone on your crew raises design issues directly with the client. Where design is concerned, until the job is finished, the architect, not the client, "owns" the project. I once witnessed a heated conversation between a client and an architect in which the client practically begged the architect to modify the color scheme he had chosen for her kitchen. The architect prevailed. You may not think this is the way things ought to be, but it's between the architect and the client. Stay out of it. If the owners wanted carpenters to design the house, they wouldn't be paying for an architect. Don't make waves by offering an unsolicited opinion about design issues directly to the client. If you have problems with the design, try to work them out with the architect.

#### Dealing with Design Delays

Letting go of design decisions represents a loss of control for most builders. This is most noticeable in the additional time it takes to resolve design issues. Typically, when an unresolved detail holds up the job, you can move things along by making a decision on the spot. When an architect is involved, however, you no longer have this freedom. Most architects want to make all design decisions themselves; unfortunately, they're rarely on site at the precise moment design issues crop up. Sometimes, you can work it out on the phone, but often the architect will want to see the problem in person. That may mean putting part of the project on hold for a few days until the architect can get there. Once the architect sees the problem, it might be a few more days

Stopping and starting portions of the work costs money, so this kind of delay drives builders up the wall. But patience is a virtue, and it may help to look at the problem from the other guy's point of view. Builders who work from their own designs can make assumptions about what have become "standard" details, but architects don't have the luxury of taking anything for granted. All of the details must be worked out in advance so that any builder who can read a set of

before you receive instruction on what

to do about it.

prints can understand what is supposed to be built. In a task this huge, some errors and omissions are inevitable.

In addition, design errors that seem obvious to builders after the structure begins to take shape are much more difficult to see on paper without benefit of a full-scale structure in plain view. Often, the owners are unwilling to pay the architect to build a scale model, making the architect's job even more difficult — increasingly so as the building gets more complex.

Considering these limitations, it's unreasonable to expect an architect to come up with solutions to every problem at a moment's notice. Before you jump all over the architect for holding you up, take a look in the mirror. How

many weeks or months did you have the prints before you noticed there was a problem?

The answer is to carefully study the plans at the beginning of the job, looking for mistakes and discrepancies. This gives the architect time to come up with solutions before the job comes to a screeching halt. Don't pour foundations without looking at the framing and architectural drawings. Don't start framing until you've studied the interior and exterior finish schedule. Catching the architect's oversights may not be part of your contractual obligation, but it's in your interest to find and correct problems early.

Plan ahead. Missing specs can also hold up the job: You can't place an order till you know what material you're supposed to be using. Builders tend to blame architects when plans are incomplete, but this problem usually originates with the owners, who often have a hard time making up their minds.

To avoid delays, give the architect and the owners a schedule for the decisions they have to make. Include both the specific items that are still up in the air — light fixtures, for instance, or plumbing fixtures, windows, or tile — as well the date by which you need to have a final decision. Make sure to allow enough time to put the order together and shop for prices. Add teeth to your deadlines by including an administrative charge for any items that are not

chosen in time. You can also stipulate an automatic completion date extension if spec lists are late.

**Samples.** Architectural specs often require you to provide samples of materials that

will go into the building. On large projects, you might also have to build mockups of walls, interior trim, or cabinets. Owners and architects might want to see samples of flooring, door hardware, brick, stone, or special paint finishes.

The owner or architect may not like the first sample you show them and you'll have to repeat the process of getting samples or doing mockups.

To avoid delays, begin procuring samples as soon as possible. If you can't produce samples in a timely manner, you're in no position to complain about how long it takes to get decisions. On the other hand, don't underestimate the amount of time it will take to provide this service, and make sure your estimate covers the cost. To keep fussy clients from repeatedly rejecting samples, include a clause in your contract that limits the number of free samples you will provide (see *The Legal Column*, 4/95).

#### Interpreting the Design

I have never built anything designed by an architect — or anyone

else, for that matter — that didn't need to be altered in some way. If something on a drawing doesn't make sense, ask the architect about it.

But don't immediately assume that what you're looking at is a mistake; it could be something left over from an earlier version of the design. As you know from your own experience, an owner may need to see several versions of a floor plan or elevation before approving a final design. When making these revisions to the drawings, the architect is often pressed for time — particularly if the revisions come late in the game. In the rush, details are dropped and mistakes are made.

Remember also that architects usually don't have time to redo every drawing in the set — they just revise the parts that have changed. As a result, they may miss a design error caused by the changed detail. Also, the detail to be revised can show up on a number of other pages of the prints, but may not get changed on all of them.

Whenever you see revisions on a set of plans, be alert for unchanged details left over from earlier versions. Always make sure the dimensions add up and that the various views agree before you start building.

Not everything is sacred. When details conflict, it's helpful to know which can and can't be changed. Don't assume that every detail on a set of prints is equally important.

There's a good chance that a given set of prints contains a number of details that neither the owner nor the architect care about.

The first time I ran into this was while working with a set of cabinet drawings in which the architect had specified a particular brand of eurohinges. I built the cabinets, and a couple of weeks later the architect sent drawings for a second set of cabinets for the same job. The design was similar to the first, except that a different brand of hinges were specified. When these cabinets were done, the architect sent

drawings for a third set of cabinets with a third brand of hardware specified. By now I was beginning to wonder about using three different types of hinges, but I built what was on the drawings, assuming that the architect had her reasons for specifying particular brands of hardware.

At the end of the job I asked the architect about it. She said she didn't care what brand I used, and had called them out only because she thought it would help me to know which companies made the *type* of hardware she wanted to use. She had grabbed whatever catalog was nearby; the brand was pure coincidence. If I had been smart enough to talk to her in advance, I would have saved myself a lot of trouble by using the same hardware for all three sets of cabinets.

went back and forth over all of the details until everything was just the way they wanted it. It's unprofessional for you to step into this relationship and throw all of that hard work out the window.

Because part of the architect's job is to make sure the clients get what they pay for, he or she may be unwilling to change the way something looks just to make construction easier for the builder. Good architects understand, however, that you probably know more about the nitty-gritty details of building than they do. If you can make a convincing argument, they will listen to your suggestions for alternative ways to put a building together.

For example, the plans may call for a large solid-sawn timber to which drywall will be directly attached. The architect's main concern is that

the timber is large enough to take the span with acceptable deflection; but you may worry that twisting and shrinkage of the timber will crack the

drywall finish. Since it's easy to overlook this kind of problem during the design stage, the architect will probably be willing to listen and to agree to an alternative — possibly a steel or LVL beam.

Do your homework. Before you ask an architect a question, make sure you have a clear idea of what constitutes an acceptable answer. If the architect's solu-

tion won't work, say so right away. You lose time when decision-making is a long, dragged-out

On the other hand, if an issue comes up when the client is present, the architect may feel some pressure to resolve it quickly. If you have a ready-made solution (and you ought to), now is the time to trot it out. In these circumstances, the architect will usually go along with you, especially if the decision will keep the job moving. If the solution makes things easier for you, so much the better.



Ideally, the architect and the builder collaborate: The architect decides what the building should look like and works with the builder to figure out how to build it. You can often convince the architect to let you put something together differently from the way it was drawn, but you'll have to come up with a better reason than "I've always done it that way." The plans you're working from are the product of a long process, during which the architect and the owner

**Learn the lingo.** Design problems can often be dispelled with nothing more than a few carefully chosen words: Client: "What's that ugly crack between the cabinet and the wall?"

Architect: "That's not a crack, it's a reveal."

Client: "How silly of me. You're a genius."

Learn the words and phrases architects use to describe what they design. If you can speak their language, you'll communicate better and have an easier time getting a hearing for your ideas.

#### Paper Trail for Problems

When you have misgivings about some part of the design, the specs, or the details, don't be afraid to voice your concerns. But be sure to raise the issue with the architect before you talk to the client. Remember, your goal is to produce quality construction, not make the architect look bad. Somewhere down the line the shoe will be on the other foot, and you'll need the same professional courtesy from the architect.

Most of the time you'll be able to work out a solution. From time to time, however, you may run into an architect who can't or won't believe that something is wrong with his or her design. When this happens, bring your concerns directly to the client. Don't take this step lightly. Most architects resent it when you go over their heads. When you talk to the client, remember that the issue is the design, not the architect. If you fail to convince the client to build it your way, document your concerns before you execute the plan.

This strategy paid off for my employer a few years ago. I was the foreman on a residential job for which the architect specified a boiler that the hvac contractor said would be noisy. At a meeting of all parties, the architect assured the client that the specified boiler would be fine; the client sided with the architect. As usual, we kept notes of what was said in the meeting, and sent copies to the architect and the client. We also made sure that the client and architect got copies of a

letter the hvac contractor sent us, informing us that sound problems were likely.

A few weeks later, as I walked around the site inspecting the exterior trim, I thought I heard a propeller-driven airplane circling overhead. A carpenter came outside, saw me searching the sky, and started to laugh. He pointed at the chimney, and said, "There isn't any plane; what you're hearing is the boiler." The boiler was so loud that the client eventually had it replaced. Fortunately, we had put our objections in writing and made sure the original work was properly executed. Neither the client nor the architect was in a position to blame us when things didn't work out.

Write it down. People attending meetings often come away with very different understandings of the outcome. You may remember agreeing to paint a wall gold, but the way the architect remembers it, you agreed to make the wall out of solid gold. To avoid misunderstandings, keep meeting notes that include the date of the meeting, the names of everyone who attended, and a list of the issues dis-

cussed and how they were resolved.

Then distribute the meeting notes to

everyone who attends a meeting, and

everyone who will be attending the

meeting. The meetings will take less

time and more decisions will be made

when you give the client and the

architect advance warning of the

provide some means for handling miscommunications. We usually include a notation similar to the following:

These notes constitute an understanding of matters discussed at the meeting. Any discrepancies should be brought to the attention of the preparer within 72 hours.

This puts everyone on notice that unless you hear otherwise, you will act on the information contained in the meeting notes. Later, if problems crop up, you can trace the decision-making process in the "official" record.

When design decisions or changes are made at meetings, the "right" thing to do is to wait for the architect to revise the drawings. Construction schedules being what they are, however, this isn't always possible and you may end up building from sketches the architect drew on the back of a napkin or a wood scrap. Make sure you hang onto these drawings — if there are problems later on, you want to be able to prove that you were following the architect's instructions.

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#### Site Meetings

When three parties are involved in a construction project, communication becomes very important. Try to schedule regular site meetings with the client and the architect. Since it's difficult to coordinate the schedules of three people, you have to make the most of the time when everybody is finally together in the same place. I recommend you keep a running list of questions you need to have answered, then fax, mail, or call in the agenda to