



# A TEAM APPROACH TO DESIGN/BUILD

BY CALVIN GOLDSMITH

Last autumn, our construction company was nearing completion of a substantial new addition and renovation when we ran into a problem. The architect had specified a light fixture we thought inappropriate, and it occupied a highly noticeable spot in the new addition. This posed a dilemma for us, since we work frequently and well with the architect, and we were on great terms with the homeowner. We did not want to insult either of them, nor did we wish to buy the fixture, put it up, and then take it down again, especially since it was an expensive, non-returnable, special-order fixture.

Builders often find themselves in this position. The architect has made a questionable call, and the builder is left with the decision of how to handle it. Unfortunately, many builders in this position are tempted to play the hero and tell the owners about the architect's mistake, and how they, the builder, will fix it. This approach usually advances the builder's standing at the expense of the architect. At best, you may sacrifice a good source of future job leads. At worst, you may get sucked into a raging whirlpool of litigation.

We wanted neither. So the light fixture went up, the owner blanched, the light fixture came down, and it was replaced. It now sits in storage at our expense. At the time this seemed to be a small price to pay to preserve our relationships with the architect and the owner. But in retrospect, what we needed was better communication with the architect. Then we might have felt freer to question the architect's decision without fear of reprisal, and the light fixture could have stayed in its dark, dusty corner at the electrical supply house.

In an effort to improve our service to customers in situations like this, I set out to explore ways builders and architects could better work together. I began by examining the basis for the traditional architect/builder alliance, and I interviewed a number of architects to get their input on the best way to structure a relationship. The result — a team approach — is founded largely on trust and communication. But since trust is a nebulous entity in a court of law, the team approach also provides a clear-cut method for handling disputes and resolving differences.

## Traditional Contract

The architect has traditionally been the owner's representative, often taking full control of the construction itself. The contract architects have used is AIA Document A201, "General Conditions of the Contract for Construction." This document is based on the principle of inclusion — that is, include everything you think could ever happen in any construction project. It is long, complex, and certain to

scare the hell out of any owner wanting to build a 2,500-square-foot custom colonial. But more importantly, it is written by AIA lawyers to favor the architect, often at the expense of the builder.

A201 puts the architect in control of everything and makes the contractor an adversary to be controlled. For example, Clause 3.18.1 under "Indemnification" states that the Contractor shall indemnify the owner, architect, and their agents from any damages caused by the construction to the extent that the damage was caused by negligence of the contractor or subcontractors, "regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder." In other words, the architect is indemnified — that is, protected from liability — even if he is partly responsible for the problem.

Another example of the document granting unfair protection to the architect at the builder's expense is under "Execution, Correlation, and Intent." Item 1.2.3 ends with the statement: "Performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results." This last clause could be interpreted to mean "if the architect left anything out, it is the contractor's responsibility to include it." This not only makes it difficult to bid jobs tightly, but puts an undue burden on the contractor.

Architect Mollie Moran, of Bourgeois-Moran and Associates in Dedham, Mass., points out that the contracts the AIA uses, as well as the training architects go through and the AIA specs, all put the architect and builder in an adversarial relationship. As a matter of practice, owners are led to believe they need a representative to act as bulldog and make the builder tow the line. This connotes a lack of respect for the builder as a professional, and puts the architect in the police business rather than in the consulting and design business he or she should be in. Moran and other architects I interviewed feel this archaic attitude must be replaced with a spirit of cooperation.

## Recipe for a Team Approach

The architects I spoke with emphasized several important ingredients in the recipe for a team approach.

**Early builder involvement.** Most architects I interviewed agreed that the earlier the builder is involved, the better. The builder is the one member of the team who is best able to provide accurate cost estimates.

Peter Thomas of Lincoln Architects in Lincoln, Mass., for example, has made this policy part of his

FOR BEST RESULTS, USE A CONTRACT THAT MAKES BUILDER AND ARCHITECT PARTNERS, NOT ADVERSARIES

regular business procedure. Rather than opening a project up to bid, Thomas likes to bring a good builder on at the very beginning of a project to get an early estimate based on a preliminary design. This assures him that his design is within the realm of the budget, and keeps him from having to do extensive changes during the expensive working drawing stage. The more complex the design, the more valuable the early involvement of the builder is. Thomas strongly advises the owners that they'll get the best deal by far by negotiating a price with one builder selected at the beginning.

Without early builder involvement, a project can easily go awry before it ever gets out the door. Last winter, for example, our company bid on a project alongside two other builders. The bids all came in within 5% of each other, and approximately 50% above the budget the owner gave the architect. One problem was that the architect specified numerous fitchplates. He had little understanding of the costs he was running up for the owner. We submitted the bid with LVL beams as an option, with a corresponding reduction in price of almost \$4,000. This was a small part of the project, but it's characteristic of the problem. Had we been involved early on, both the owner and the architect would have benefited.

**Realistic expectations.** According to architect Dave Glassman of Glassman Associates in Needham, Mass., setting realistic expectations is the architect's number one job. The architect should hold the owners' hands and explain the likely track the new construction or renovation will take.

For example, to be responsible an architect should say, "We will take every precaution to minimize dust and give you back your kitchen quickly. But to be truthful, there will be dust and your routine will be interfered with, so please expect it. This is, after all, a major renovation project." Contrast this statement with an architect telling his client that he will stay on top of the builder and ensure that there will be no dust and only minimal disruption of daily routines.

Glassman believes these overly high expectations set the builder up for failure. Getting the owner to face reality as early as possible makes the rest of the process much smoother.

**Mutual respect.** Any type of team approach will depend heavily on the mutual support each party can offer the others. The architect must take the opportunity to praise the builder to the owners, and the builder must do the same for the architect.

Think about it from the owner's standpoint. When are the owners more likely to feel confident that they are getting the best job possible? When the architect and builder support each other and communicate problems in an unbiased and constructive manner? Or when the architect and builder are locked in the all-too-familiar pattern of mutual blame and finger-pointing?

But while most architects will agree in theory that trust is of paramount importance, different architects have different ideas about how this trust is achieved. Not all the architects I interviewed were ready to advocate an equal relationship with a builder, especially with regard to the issue of money.

## The Money Issue

In the traditional model, the architect is the owner's advocate when it comes to money. In a

team approach, the architect functions more as an adviser to recommend initial disbursement schedules, percentage of completion, and retainage.

Glassman sees the architect's role as a facilitator in these matters. In this capacity, he thinks the architect must balance the builder's need for sufficient cash flow with the owner's need for a level of comfort about money paid out. He stressed, however, that he is an adviser; the money decision rests with the owner, and ultimately this is the builder's concern.

To handle this, our company always presents a fair disbursement schedule up front with our contract. This ensures that our need for a reliable cash flow is met. We are much more sensitive than any of the other parties involved about who has to get paid how much and when.

An architect has a much different perspective, and his "advice," however casual, might not square with a builder's. Glassman, for example, feels the last 5% to 10% of the project is the most difficult, and he always recommends a modest (5% to 10%) retainage to the owner on those items where it is appropriate. I feel strongly, however, that retainage is often perceived by the owners as money for the taking if they can come up with enough complaints about the construction. It creates a monster out of an otherwise perfectly reasonable client. People hate to think they are giving up something they don't have to. I would never agree to more than 5% retainage, and then only very reluctantly as a last resort and only if we are working with an architect we know and trust.

## Team Structure

The desirability of an architect/builder/owner team came through loud and clear from all the architects I interviewed. They all recommended this as a necessary condition for a successful, enjoyable project. However, not everyone agreed on the actual structure of this team.

The team approach can take many forms. A team can be a loose association, or it can be a builder with an architect on staff, or vice versa. It can also be a partnership between builder and architect.

In its simplest form, a team can be a simple understanding between a builder and an architect to work together when necessary. Whenever either secures a client who also needs the other's services, that person agrees to call the other in. In this case, contracts for the architect and the builder will be with the owner, and will be separate from each other (see "The Mechanics of Working Together," next page).

Our company is very comfortable with the simplicity of this approach. It brings the team together when there is a need, without having to sustain the relationship once the need has been satisfied.

A more formal partnership, on the other hand, is an easier sell to the owner. You can offer one-stop shopping every step of the way. However, as the survivor of a couple of ple of partnerships, I urge caution.

Don't become a partner without weighing the pros and cons. These relationships are extremely hard to sustain.

If you do intend to join a partnership, make

loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, **regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.** Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in Paragraph 3.18.

### 3.18.2 In claims against any

*This clause under "Indemnification" in AIA document A201 indemnifies the architect — that is, protects him from liability — even if he is partly responsible for the problem.*

which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

**1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.**

**1.2.4 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall**

*The last clause of Item 1.2.3 under "Execution, Correlation, and Intent" could be interpreted to mean "if the architect left anything out, it is the contractor's responsibility to include it." This not only makes it difficult to bid jobs tightly, but it puts an undue burden on the contractor.*

# THE MECHANICS OF WORKING TOGETHER

*Remodeling contractor Steve Farrell of Los Altos, Calif., and architect Charles Huff of Pleasanton, Calif., have a unique partnership. While they only work with each other on a job-by-job basis, the architect and contractor have a standing agreement to recommend each other when necessary. This has developed into a working relationship that allows them both to offer a full line of design and construction services. We talked with them to get a clearer picture of how their partnership works.*

**JLC:** *What led you to a team approach?*

**Farrell:** When we get a call from a client, they usually have a good idea of what they want, but they don't have a complete set of plans. If these projects were simple kitchen or bath remodels, we could probably handle the design work. But our projects are large and diverse, requiring complex design work, so we often wind up recommending an architect who can translate the client's ideas into working drawings.

Yet, by the time we have a job lead and have gotten to the point of sending a client to an architect, we have time invested that's worth about 1% to 2% of the project. If we send the client to an architect who says, "Oh, sure, you contacted these builders but I know some builders who I work with a little better," we have just lost our investment and have handed the project over to another builder.

Last year we thought we could organize things in such a way that we at least wouldn't run the risk of losing a project in open bid after we'd drummed up the lead. We decided to arrange a deal with someone we're compatible with, who people tend to like, who will listen to people without interjecting his own ideas first, and who has a good sense of design. Since we usually recommend Charles Huff for these reasons, we decided to approach him. Eventually we would like to formalize our partnership even further so we can get paid for the initial time we spend, but this will require some careful planning.

**JLC:** *How do you structure the team?*

**Farrell:** We each have a separate contract with the owner. The architect contracts for the design work, and we contract for the rest of the project. The architect makes himself available to us, however, if there is a question about the design or if the owners change their minds as the work progresses.

**JLC:** *Who secures the permits?*

**Huff:** The architect. My responsibilities are to take the owner from ground zero, create a preliminary plan, check with zoning, draft the construction drawings, and get them through the building department.

I make an effort to limit the plans to just what is needed to secure the permits and communicate to the Farrells what is to be built. They have the experience to know how the building is put together. I do have to draw a framing plan, for instance, to secure the permits. The city needs to see the location of shear walls, the size of beams, or anything that tells the engineering story. But I don't have to waste time drawing details of every beam connection and wall corner.

**Farrell:** Charles doesn't have to charge for a whole lot of things that we already know how to do. He doesn't include sections of windows as if we were going to site-build them, or show the blocking behind crown molding, or other general information. He keeps the plans simple to minimize design costs. This also makes our life easier and the project run smoother.

We can no longer make field changes in California. If a detail is not built to plan or a change is made, the plans have to go back to the city for review. Because of this, the head of the San Francisco Building Department recently urged architects to keep plans to a minimum. If there's a detail on the plan, the contractor has to build it to that detail. On the other hand, it's no big deal if it's not on the plan, unless it's an important structural detail, in which case it will have been called out in the initial plan review.

Charles would have to give much more detail, however, if he were putting the plans out there to competitive bid. Without the trust and communication we have between us, the design would have to have a lot more detail, enough so he would be clear that all the bids reflected the same level of quality. Charles knows that if the quality of our product wasn't adequate, we wouldn't get the jobs, and so there would be no sense in working with us as a team. Our business is built on repeat customers, and Charles knows that. In fact, he depends on that.

**JLC:** *How do you charge for the design work?*

**Huff:** I charge for the initial meetings and preliminary design on an hourly basis. But the cost for the plans, including engineering and the time I spend getting city approval, is based on a cost per square foot equal to roughly 7% of the construction project. I charge for this at the completion of the construction documents, just before construction begins.

For this to work, I have to be in contact with the Farrells from the beginning. I usually fax a copy of the initial design to get an idea of the cost, so I know I'm within range of the budget. After the plans are finalized and approved, they go to the Farrells for an actual estimate, on which I base my price.

**JLC:** *How do you handle design changes once construction has begun?*

**Farrell:** There are three possible scenarios where a change might be made, and each one is handled differently. The first case is when the owners request a change because the design is not what they expected. For example, an owner might see the design in three dimensions and say "Whoa, stop! That doesn't look like the plans." Now, we better have that built like the plans, otherwise we're hung. But if it is built to plan then it is Charles' responsibility to correct the design. If he failed to meet the client's expectations, he usually bears the cost of this change, or he may negotiate this as additional work. We, of course are available to him during this redesign to make sure the changes still fit within the budget. These problems are rare because we are in constant communication with the client as the work progresses. We can usually avoid building something that is very different from the client's expectations.

In another case, an owner may simply want additional work done — an extra bedroom, or more space in the kitchen, for example. In this case, the redesign work is handled under a separate contract by Charles, much in the same way we will handle the added construction with a change order.

The third scenario is when something is designed that is questioned by an inspector and must be changed. Hopefully, this will be recognized before we build it. In this case, we send it back to Charles and the new detail is added as an addendum to the plans. If we build it and an inspector demands a change, however, Charles will redraw it on his own time, and we will rebuild it on ours. So far we have had very few of these problems.

sure it is a relationship built on the true needs of all parties involved. This need should be spelled out in a formal agreement that clearly defines shared responsibilities and benefits.

## Fair Document

Above all, make sure you understand the project documents you sign. Ideally, you should make a point to write any contract you sign, but because we aren't all lawyers, this isn't always possible. You may have to find a friendly contract written elsewhere.

Another AIA document, A191, "Standard Form of Agreements Between Owner and Design/Builder," is a good place to begin. This document governs the relationship between the owner and a single party contracting to both design and build the house. The agreement is written in two parts: The first is for the preliminary design and budgeting phase, the second for the final design and construction phase. In many cases this contract is far more appropriate for a team approach to design and construction than any other document; A191 is easier to read and less detailed. And while every contract tends to favor whoever writes it, in this case the favoritism also works for the builder, since the builder and architect are virtually indistinguishable.

A191 is best suited to a team that exists as a single business entity — a builder and architect that have a formal partnership. If you are not part of such a partnership, you may still want to use this document as a basis for your contract with the owner. You contract with the owner for your services, let the architect contract for his. Hire a lawyer who is knowledgeable in construction law to walk through the document with you, omitting items relating to design unless your firm actually does the design, too.

By this document, you are not a party to a contract with an architect, and consequently, you are not submitting yourself to the architect's formal control on the project. You and the architect work together to satisfy the owner's need. Each is responsible for his own work, and is legally answerable to the owner, who controls the purse strings.

The owner may request that the architect help interpret the degree of completion you claim on your disbursement request. You probably cannot escape this. It is the owner's right to do so. However, you have not agreed that the architect is a party to your contract, so his control is only in influencing the owner, which, if you have a good team, should not cause problems.

At the very least, make sure your contract includes an arbitration clause, so you have a clear-cut method for resolving differences without resorting to full-blown litigation. Arbitration may be painful at times, but it will almost always prove cheaper than going to court. An arbitration clause generally says that each party agrees to be bound by the findings of an arbitration hearing, alleviating the need to have a judge or jury decide. A more detailed version of this clause appears in both AIA documents mentioned above. ■

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