ow often do you pass a residential construction project in your town and think, "Now, that's a good design"? And how often do you pass

by Paul Eldrenkamp

a project and shake your head in disbelief? Or.

almost as bad, pass a site and not even look twice at what's going on, it's so bland and generic.

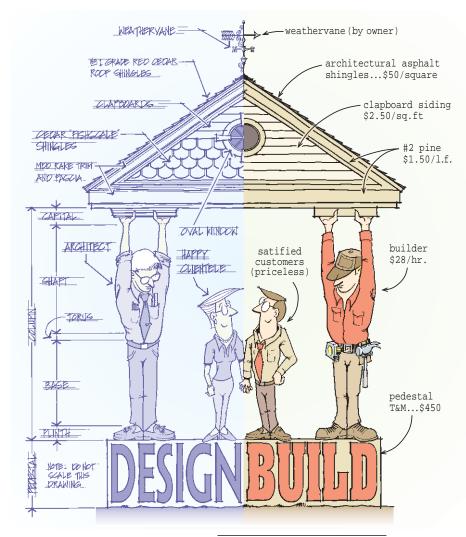
If your experience is like mine, you'll agree that the quality of residential design in America is not high. Although both professions are responsible, the blame belongs more with contractors than with architects, because, for the most part, when prospective clients want some residential construction work done, they call a contractor, not an architect.

So we're usually the first ones in and, as such, should take our responsibility to good design seriously. Like it or not, that means that for any significant project, we contractors need to make sure the client gets a good design professional on board.

Design by Designers

It's a mistake for the business owner to be the principal designer. Establish project parameters? Definitely. Encourage a style or a look or a design direction? Yes. Take primary responsibility for producing and troubleshooting that design on paper? Almost certainly *not*.

Remember, except in the smallest compa-



PARTNERING WITH ARCHITECTS

y approach to working with an architect was to hire one, but there are other ways to secure the services of a design professional.

De Facto Partnership

A de facto partnership is a relationship in which both the architect and the contractor have their own businesses. Each has his or her own contract with the homeowner, and there's no umbrella agreement defining respective roles — just the separate contracts. In essence, it's a three-way, equal partnership.

This arrangement works well only if the contractor and architect are used to working with each other and have a high level of mutual trust and confidence. They can solve problems and settle differences behind the scenes, then go to the homeowner with proposed solutions. They don't force the client into a conflict resolution role. Clients are rarely qualified to arbitrate between a contractor and an architect and universally resent the requirement.

Roles and responsibilities. To get started, meet with one or two architects whom you respect and have worked well with in the past, and who seem open to the idea of design-build. Spend some time talking about what's gone well and what's gone badly on past projects. Work out your respective roles and reciprocal responsibilities. Talk through some "what if" scenarios: for example, "What if, at the end of the design process, the client asks for names of other contractors?" "What if, after the preconstruction conference, the client asks if the architect really needs to put in any more billable hours during construction?" "What if the client turns out to be the type who wants to keep endlessly tweaking the design even after construction starts? How do we mutually deal with that?"

The primary goal of this relationship should be that, on appropriate new-client leads, the architect will say, "The only contractor I work with is Sue," and the contractor will say, "The only architect I work with is Joe."

The supporting goal is that both parties — architect and contractor — need to be fully committed to making the other look good, and to working hard to compensate for each other's weaknesses. For example, if the contractor consistently underbudgets, the architect should insist on adding a larger contingency during the initial budget process. If the architect is prone to miss deadlines, the contractor should provide ample, gentle nudging for the architect and set realistic schedule expectations for the client.

But who's accountable? De facto partnering was a good way for me to get my feet wet in design-build. My

main reservation, however, is that this approach lacks the force of sole accountability for the success of the endeavor, as when the architect works for the contractor and vice versa. Assuming all responsibility for whether my company ultimately succeeds in its design-build services makes me vigilant as no other arrangement would.

Legal Partnership

A legal partnership takes the de facto partnership one step further and creates a single legal business entity with the contractor and architect as equal partners. But remember that more partnerships eventually dissolve than really take off. The success rate is lower than that of marriage and the cost of legal separation can be nearly as high.

Despite the risk, I like the symbolism of an equal builder-architect partnership. A contractor who teams up with an architect as an equal partner in a design-build firm is making a profound statement about his or her respect for good design.

Subcontractor

In another arrangement, either the architect hires the contractor or (more likely) the contractor hires the architect as a subcontractor. It's similar to the traditional contractor-subcontractor relationship — including pertinent IRS implications — except the stakes are higher. If you think it's hard replacing an electrician in the middle of a job, try replacing an architect. An underperforming plumber would have to be doing pretty serious damage to cause a client to defect; an underperforming architect, however, can easily lose you the whole job before you know it.

An advantage to having architects as subcontractors is that you can have a pool of architects to offer clients. A disadvantage is that the subcontractor architect may feel less loyalty to your company, and you may find yourself spending more time monitoring progress and maintaining accountability. It's always essential to have a clear and written description of expectations and responsibilities, but it's particularly important when dealing with a subcontractor architect. You also need a very clear policy about who gets to handle new client leads generated from jobs designed by subcontractor architects.

Note also that with an architect as a subcontractor (or employee, for that matter), your insurance picture may change. Consult your agent — you may need to pick up errors-and-omissions insurance.

— P.E.

nies, it's the nature of the role of president or owner not to allow time for much in the way of tangible work. An owner acting as principal designer often sees late hours, slow progress, and reduced effectiveness in other areas of the business. Too often, I hear of contractors doing their design work late at night, after the kids have gone to bed and all the pleasure and inspiration have long since faded. Contractors should be just as ready to outsource design as they are to outsource other special skills.

I'm keenly aware that I'm trying to reverse the historic and still prevalent reluctance of contractors to work with architects. Builders as a group tend to regard architects as nonessential, complicating entities whose primary skill seems to be shifting responsibility away from themselves when the budget goes awry. I also know, however, that those builders who've overcome this mistrust and learned to collaborate with good design professionals not only provide a superior service but also gain a formidable, competitive advantage over those builders who haven't.

A Team Effort

What I'm describing, of course, is design-build, defined as an arrangement in which the design professional and the construction professional collaborate with each other as a team and as an entity, working on behalf of the client from the earliest stages of the design process all the way to completion of construction. This is the most effective strategy I know to improve the quality of residential construction in this country.

It wasn't until I decided to get out of competitive bidding altogether (see "Farewell to Competitive Bidding," 7/97) that I started picking up speed in the direction of design-build. I focused my marketing on getting prospective clients to call *before* they had plans. This I accomplished by working to earn a reputation as an effective "go-to" person — someone you call when you want something done ("Call Paul; he'll figure

out how to get your addition built").

That strategy worked extremely well; soon most of the people who called me about a project were calling me *first*, before any design professional was on board. Initially, I gave clients names of a few architects they might hire; eventually, I narrowed the list to one. Doug Ruther was a friend who did residential design on a moonlighting basis, and we had worked together as an informal team. The day after he was laid off from his day job, I hired him, and Byggmeister was born as a bona fide design-build firm.

The Right Relationship

Although there are four basic ways to create a design-build team — de facto partnership, legal partnership, architect as subcontractor, and architect as employee (see "Partnering With Architects," previous page) — I'd already felt my way through enough professional relationships to develop a preference for the employee option. In that option, accountability for the success of the job is clear cut — all fingers point to me. I can hire exclusively for design skills, rather than have to find a candidate with business skills, as I would in a partnership or subcontractor relationship. I believe that, in general, design skills and business skills don't readily mix. Larger architectural firms acknowledge this maxim with the position of managing partner. Fundamentally, a design-build firm, like any firm, needs to be a good business to be of much benefit to anyone.

Doug is an employee, but his employee status includes some special employer responsibilities. In our company, the architect has as much say about what goes on the punch list as the client does, and that's how it should be. The staff architect needs to have ultimate authority over design issues — total veto power. The integrity of the arrangement hinges on this veto power.

At my company, even within the employer-employee relationship, we nurture and manage, rather than eliminate, the historic tension between architect and contractor. Properly handled, this tension works to our clients' benefit. A good collaboration requires dialogue and disagreement, advocacy and compromise, not subservience.

If this sounds to you like too much of a stretch, either you don't have the right architect candidates in mind, or you're not the right contractor to be hiring an architect.

Charging for Design

To start, I created a business plan and budget for the position. Doug and I reviewed cost data for a series of jobs we'd done together and calculated that, on average, design fees ran about 6% of construction costs. We agreed that we wanted to produce more thorough documentation than we'd had previously, and so we pegged future design fees at 8% of the construction budget.

We quickly found it useful for Doug to handle full product selection for each job. Clients found it helpful, of course, but happiest of all were my lead carpenters. They were able to start a job knowing everything that would go into it. We now place all special orders as soon as the contract is signed. With near 100% reliability of supply, my crews have everything required to finish the job at least a week before it's needed.

Product selection proved time consuming, however, so after some further analysis, we bumped the design fee up to 12% of construction costs. On average, this worked well, but we found that some jobs (and clients) took more time than others. To cover that contingency, we moved to straight hourly billing. We now develop a design budget based on 12% of construction costs — and do periodic compare-to-budget calculations for the client — but we bill by the hour (see "Design-Build Fees," next page).

Practical Strategies

Regardless of the legal or practical structure of the design-build arrange-

ment, several things must happen:

• Clients must understand that they're buying the whole package — design and build — and that, unless the contractor screws up, at the end of the design phase he or she will be the one building the job. This should be specifically laid out in the contractor's part of the design agreement. Contractors make their money not as consultants during the design phase, but by keeping their crews busy and building jobs. That's where the focus needs to be.

- The contractor needs to set good budget and schedule parameters up front, based not on wishful thinking but on real-world comparisons with similar, completed projects. There also needs to be a clear description of project goals.
- That being said, clients and architect need to understand the difficulty of estimating a project before it has been fully designed and documented. My design agreement has a clause that says exactly that.
- The contractor should be responsi-

ble for keeping the project on budget by providing financial updates throughout the design process. The architect should honor that responsibility and not sabotage it with offthe-wall requests or expectations. It's all right to offer the client more costly options, but they need to be just that: *options*.

• There should be a target design *and* construction schedule that's agreed to by architect, contractor, and clients. But clients should be clear about their influence over the schedule: If they

BUYING IN tO DESIGN-BUILD

All three parties — contractor, architect, and client — need to buy in to the design-build process to make it work. But each party has reasons to resist the idea.

Contractors resist design-build on two fronts: There are those who refuse to acknowledge the need for good design in the first place, and there are those who hamstring their ability to deliver good design by underestimating the time, cost, and skills to do it well.

No one in the first group will have read this far; it's the second group that warrants attention.

For the most part, a contractor should not act as a designer unless he or she has very good design skills and a very small company. Good design takes intuition and aptitude, but it also takes training, experience, and undistracted time — typically, much more time than should be taken away from managing all but the smallest businesses.

Architects. Some architects absolutely will not consider anything but competitive bidding. It's difficult to imagine the circumstances under which a contractor would recommend such a design professional to a client. If a client comes to me with a project and I bring an architect on board, that architect should not recommend that the client put the project out to bid unless I've done something seriously wrong and the architect has first talked to me about ways to salvage the relationship. A few architects can't seem to understand this concept and therefore aren't good candidates for design-build collaboration.

Some architects will not work directly for a contractor, instead insisting that their contract be with the

client (some states require that by law). That traditional arrangement can be highly successful, given the right combination of contractor, architect, and client, and can be a great first step toward systematic collaboration. But the pitfall in that approach is that no one party assumes sole responsibility for the combined efforts.

Clients. One of my biggest career surprises has been how receptive most homeowners are to the idea of design-build. I have found amazingly little resistance — in fact, I've encountered more relief from clients than suspicion at the prospect of design-build.

Of all the qualified prospective clients I've interviewed since starting to offer full-blown design-build services, more than 90% have signed on. Remarkably, that percentage has remained constant through our various design fee structures. This has convinced me of the power of design-build as a sales strategy.

Clients do sometimes worry about losing the ability to comparison shop if they jump on board with a contractor-architect team early on. But they *can* still comparison shop — as much as they want. They *should* comparison shop, in fact. They just need to do it early in the process — before they've asked anybody to put in more than a couple of hours of free consulting.

If what they really want is to be able to shop a finished set of drawings (which actually diminishes their leverage over both budget and schedule), then you should probably disqualify them and move on to more promising leads.

— *P.E.*



BYGGMEISTER ASSOCIATES, INC.

Design-Build Fees

The following work will be billed at the rate of \$110 per hour:

- Participating in meetings to discuss this project with homeowners, subcontractors, and suppliers, both on site and at showrooms
- Traveling to meetings (one way), billed at 50% of the hourly rate
- Taking measurements and other documentation of existing conditions
- Conducting research to determine what zoning, board of health, or historic district restrictions apply
- Assisting with the assembly of applications for special permits or variances and attending any required hearings for such special permits or variances
- Soliciting feedback from subcontractors and suppliers regarding project feasibility and budget
- Assisting in the selection of products and finishes, as well as coordinating the various product selections to ensure overall appropriateness and compatibility
- Developing schematic floor plans and associated elevations
- Producing design development drawings
- Producing permit drawings and specifications

The following items will be billed at invoice cost:

- Survey fees as approved in advance by the homeowner
- Structural engineering fees as approved in advance by the homeowner
- Other consultant's fees as approved in advance by the homeowner
- Application fees for special permits or variances (standard building permit fees will be included in the construction contract)
- · Reasonable printing, copying, and postage expenses

The author's contract details the billing rate for design.

- delay a decision, the project will be delayed.
- The architect and contractor should meet to discuss the job at least monthly during the design process and at least weekly during the construction process.

Care and Feeding

The constant temptation for any good architect employee — especially one who sees the difference between billing rate and compensation rate without really understanding why there needs to be such a difference is to go off and start his or her own practice. To minimize that likelihood, my job is to come up with a steady flow of interesting projects and good clients, and to maintain a high-quality, highly professional crew that can do full justice to the architect's designs. I strive to handle all the administrative and overhead tasks pleasantly and reliably so that the architect need focus only on design work.

Even after meeting these standards, you may find that the architect employee you've been training and grooming for many years will one day go off on his or her own.

However you handle the immediate need to replace an architect who decides to leave, your overall approach should be the same as for staffing any position at your company. To begin with, your company should be a good employer; your organization should have no truly indispensable personnel; you should have a variety of social and business networks that bring a steady flow of prospective employees to your door; and you should always be on the lookout for talent to supplement or replace what you've already got on board. Á

Paul Eldrenkamp is president of Byggmeister, a high-end remodeling firm in Newton, Mass.