

# “Are You a Design/Build Phony?”

by Christopher Grawburg

For many years I have been a strong supporter of the design/build method of construction and worked hard to convince others of the benefits: shorter pre-construction time, team environment, single source responsibility, overall costs savings. Any project that we didn't have a hand in designing and building was left for those “other” contractors.

That was then; this is now. I come to you confessing a change in my heart. I'm what some might call a “backslider.” Over the last few years I have seen the idea of design/build so misused, misapplied, and misunderstood that what was once called design/build can hardly be found today. I'm much happier to pick up a set of pre-designed plans, scrape and dig to be low bidder, then work to get change orders. But I must confess, there's a small part of my design/build soul that hasn't died - a little flicker of light that wants to be brought back to the fold. Is there someone out there who can help me? For you to save me, you need to know why I fell away.

- 1. Does anyone even know what design build is?** The design/build of my early career meant that the HVAC sub was responsible providing preliminary budgets and conceptual design. The builder selected a sub that was the best mix of system and price and moved forward with final design being the responsibility of the selected HVAC sub. Today, everyone calls themselves a design/build contractor. Getting a sub's suggestion on the HVAC system, having an MEP engineer design the system, and sending the plans out for bid is **not** design/build. That's hard bid. So is asking the HVAC subs to price a pre-



prepared narrative and taking the low price. Hard bid, not design/build. Our industry needs to educate architects, builders, and subs on what really is design/build and correct those that misuse the concept.

**2. Most general contractors do not have the ability to select HVAC subs on anything other than price.**

Despite my best efforts to explain why a 100,000 square foot office building should not be conditioned with 5 ton split systems, many builders ignore a superior design like rooftop VAV because the split system price is cheaper. Selecting a subcontractor on price alone is not what design/build general contractors do. If the builder does not have the ability to distinguish or understand the differences in proposed systems, they have no business being in this arena. Builders should be selecting subs based on a combination of price, system selection, schedule, and competence not just on price.

**3. Some HVAC subs are willing to propose inferior systems in order to be cheap.** There are HVAC subs who know that their builders and architects can't select their sub on anything but price so they suggest, budget, and then design inferior HVAC systems in order to be a low bidder. This is the sub that suggests duct board and bypass zoning systems when spiral and hydronic systems should be installed. He doesn't balance the system or do chemical treatment because he knows no one will ask and it makes his price lower. The sub who proposes the correct system with the necessary post-construction services is considered too expensive and, in the end, the owner gets terrible system. When a cheap HVAC system



performs poorly, the entire design/build industry gets a black eye. As a builder, can you identify a cheap system?

4. **Architects and MEP engineers often resent when the HVAC system is designed by the HVAC sub.** There are times when A/E firms refuse to coordinate the electrical and plumbing trades with a subcontractor-designed HVAC system leaving a potential mess for the field staff. Some A/E firms will try to charge higher fees claiming that they have to do the coordination work of the HVAC sub's drawings. In fact, because so many general contractors pick cheap subs over competent subs, the A/E firms may have a point.
  
5. **Design build doesn't mean the sub is responsible for architect or builder omissions.** The idea of single source responsibility is one reason people like the design/build method. Being able to maintain original budgets and reduce change orders keeps pricing consistent throughout the project. But design/build proposals and drawings need to be read, scoped out, and understood by everyone involved in the job. If the HVAC proposal and drawings note that electrical disconnects are to be provided by the electrician, it is not HVAC sub's fault if the builder does not get the electrician to pick up disconnects. Many builders force their mistakes on the sub all in the name of "it's design build, a competent sub like you should know you need to include disconnects." It's easy to maintain construction budgets when subs are forced to eat the estimating mistakes of the builder.

You can see I've grown cynical. I want to love design/build again and I want my colleagues in the construction industry to



understand and appreciate the benefits of a properly executed design/build project. I'd appreciate your comments and suggestions on how we can educate our industry as to what really is design/build and how we can bring the team approach back to building.

