Editor's Message

Uncovering the Value Proposition of Component Design

by Joe Hikel

Using component design to drive your business strategy

Design is something we do in order to solve our customers' problems. We typically convert customers' plans into shop drawings as we operate software provided by our connector plate suppliers. We then take those shop drawings and use them to manufacture components to match what we have designed. Seems simple enough, doesn't it? Not so fast. In my opinion, the big challenge is nailing down the value proposition of the dollars we spend doing design.

The first great challenge I see is that our customers want to treat our products as commodities, but we as suppliers think we add value to the construction process largely through design. I would venture to say that in almost every bid situation several component manufacturers will propose very different solutions that our customers want to treat as the same. Our salespeople can easily feed back how our proposal stacks up in terms of price, but very rarely can they see how one of our design strategies stacks up against the rest of the competition.

We don't always acknowledge that our technicians have a major impact on the success or failure of a project as it runs through our facilities. But we should, as they have significant effect on material and labor costs with their knowledge and diligence in the design process.

There is commonly wide variation in these strategies from manufacturer to manufacturer because of the estimating process employed. Some of us design jobs as close to shop-ready as we can. This is done to optimize the component designs so we can provide as competitive a bid as we can without leaving anything to chance. Some of us have established estimating tools that crank out bids quickly so we don't have to spend valuable resources on jobs we don't get. Some bid jobs with minimum scope of work to make their base bid price as low as possible. Others offer proposals that cover more than the construction documents specify to help the customer use components to the fullest extent possible, maximizing value for both vendor and customer. Other variables include software differences from a brand perspective as well as settings in the same software.

Experience and ability varies from designer to designer. Lately I have seen proposals that include drawings that do not meet the latest code requirements. This could have serious ramifications for the individual component manufacturer and builder who chose to cut the corner. It also has the potential to hurt the industry as a whole if a failure would occur or some type of construction defect case were filed after the fact.

We don't always acknowledge that our technicians have a major impact on the success or failure of a project as it runs through our facilities. But we should, as they have significant effect on material and labor costs with their knowledge and diligence in the design process. Mistakes can have liability consequences as well if the wrong loads are taken off and applied or the designer makes other omissions. Remember the engineer who seals our drawings is only certifying that the individual drawing will resist the loads that are shown on that drawing. If the wrong loads are applied it is our risk, unless we confirm that these are the loads the engineer of record or the building owner desire to have applied. Some EORs criticize our

Continued on page 8

at a glance

- ❑ The fact that ten truss technicians may come up with ten completely different designs for the same project is evidence that components are not commodities.
- ❑ It is very important to confirm that the applied loads are the loads that the EOR or building owner has specified.
- ❑ Using unique ways to share design best practices is a great way to develop skills and build strong teams.

Editor's Message

Continued from page 7

industry for taking on responsibilities requested by our customers, yet not communicating back through the chain so that those responsible for the design know that their design concept has changed.

Additionally, how many of us have technicians stepping too far into the area of project design by designing connections and sizing beams, joists and rafters, yet do not ensure that there is a customer review and approval process in place? In these cases, the responsibility for code compliant load paths is placed where they belong and acknowledged. These concepts are worth some thought by everyone in our industry.

So far I have described some significant challenges our industry faces relating to design—without many solutions. I do have some recommendations:

- **If your client tells your salesperson your price is too high, don't believe the client at face value.** I'm not suggesting you call them a liar. What I mean is be mindful that there very well may be other factors at play aside from the price. This is the easiest reason for a client not to buy from you! There could be a relationship in place with your competitor and the client, his owner, the architect or engineer giving him or her preference. Don't lower the price until you dig a little deeper. Schedule a meeting with you, your salesperson and the client where you thoroughly review your scope compared to the competitions'. These are hard meetings to get done in this electronic age, but it is my opinion that this is a crucial step in finding out where you are in your clients' buying process. It also gives you an opportunity to add value to the process by pointing out how much knowledge you have about your clients' project, business and how much you can help.
- **Best practices in design.** Another idea I have may help to transfer best design practices among technicians in your organization. I recommend assigning the same project to every technician on your team, and then have a meeting to decide the best solution to your customers' problem. We did this in our organization and it really was an eye opener. Don't make the mistake of assuming the experiences and abilities of your designers are necessarily the same!
- **Start a dialogue between design staff and production staff.** It helps a technician to understand what production challenges they have potentially created if he or she spends a day on the line actually helping to manufacture the product they have designed. Talk to your software provider for potential training and use SBCA's Truss Technician Training tools to get your team moving in the right direction. I also suggest getting your technical staff to BCMC this year to participate in the design track and interact with yours and other software vendors. Encourage them to seek out any other opportunity to see how others are dealing with the same challenges you are.

I hope you are having a good spring. Get out there and make something happen! SBC

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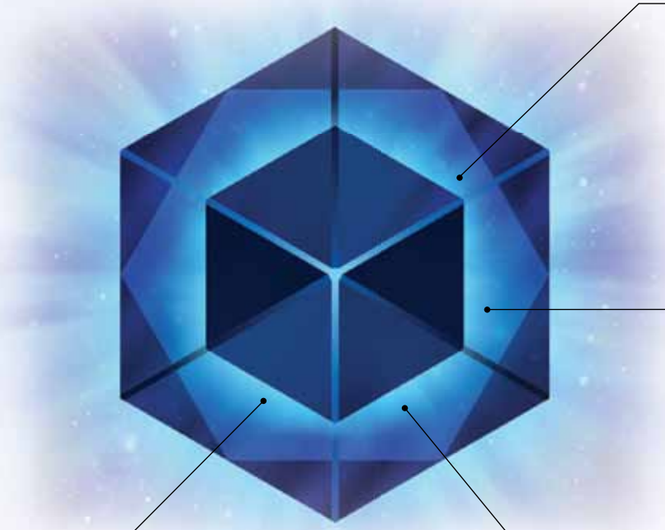

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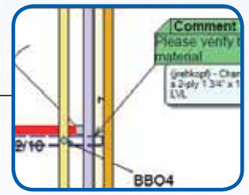

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