



Standing Up & Being Heard

by Marisa Hirsch

Bryan Hill, P.E., has never sealed one truss placement diagram. In July 2006, he decided to work with WTCA to ensure that he and other engineers in California wouldn't have to anytime soon. When the California Building Standards Commission (CBSC) met to approve the 2006 California Building Code, Hill stood before the board members and told them why the proposal put forth by the Division of the State Architect (DSA) simply made no sense.

Excerpts from Hill's Letter to DSA

"If a truss placement diagram is sealed by the truss designer what weight does it hold in respect to the framing plan sealed by the building designer?"

"There is one person or firm that is responsible for the overall building and that individual should hold the decisions as to how they want their building designed and fabricated."

"If the sealed truss placement plan is going to be a requirement, differing enough from the original intent of the building designer, and there is a discontinuity in the load path, the building could be subjected to greater issues than the paperwork requirements placed upon the structure by the codes."

"I would like to see the Division of the State Architect – Structural Safety reconsider requirements of sealing the truss placement diagram (TPD), at least by the truss designer, as there are many other structural safety concerns that out weight the need to have a professional engineers seal on a document that typically gets copied and shoved into the back pocket of the truss erector."

DSA, whose requirements are limited to structures under the supervision of the State Department of Architects, wanted to add language to the 2006 California Building Code requiring sealed truss placement diagrams for their buildings. If Hill, an engineer at A.C. Houston Lumber Co. in Roseville, CA, hadn't been there, they probably would have succeeded.

Hill was contacted by WTCA after staff attempted to communicate with DSA regarding their proposed code, but had not made any headway. Hill agreed to contact some of his colleagues, attend the public hearing of CBSC and speak to the commission as a truss design engineer who did not feel he should be sealing truss placement diagrams.

"I approached them from the engineer standpoint," Hill said. "I'm an engineer in the field and I don't want to sign these. What would be my responsibility if I did?"

Shut Out, Not Shot Down

Armed with a handful of copies of a letter he planned to read to the commission (see sidebar), Hill attended the first day of the hearing in July

2006. On that day, Hill tried to speak with a DSA member one-on-one about why he was there, but was immediately told that DSA would not budge on the code. "Right off the bat I was kind of shut out," Hill said. "So I said 'Ok, that's the guy I'm going up against.'"

Eventually Hill was told that the code chapter he was interested in would be discussed on the last day of the hearing, and so he returned then. During a break on that day, he decided to approach two CBSC board members—which proved to be much more successful than speaking with a DSA member. After talking with them during a break, he felt they listened to and understood him, and that this benefited him when he formally presented his case.

It was the end of the day when he was finally called to speak about the code language he wanted to address. He did so alone, due to his peers' schedules not

allowing them to participate. When he stood to speak to CBSC and the men from DSA (one of them was the man he'd tried to speak with earlier), Hill found that the room's layout put him physically two feet below the Chair of CBSC and a foot below the DSA members—not a setup that served to ease his nerves.

"Your anxiety level is pretty high," said Hill. "But you know there's a job to be done and you've got to get it done. Sure, you're going to be a little bit nervous."

More Response, Less Resistance

Despite the somewhat intimidating situation, Hill clearly stood his ground and presented a convincing case, because the board was responsive. After reading his letter (which detailed reasons why requiring sealed truss placement diagrams does not make for sensible professional responsibility language) aloud to the room, Hill waited for a response from DSA as to why this language was needed. But the room remained silent until the Chair of CBSC requested a reason for it.

"That's when [the DSA member] started thumbing through the five binders he had on his desk," said Hill. "Then the chair said 'Mr. Hill has asked you a question. He deserves an answer.' And that's when [DSA] said 'I really don't know.'"

Hill said that at that point in time, the other DSA member covered the microphone, the two men had a conversation, and then the previously silent man told the Chair that he'd thought it was a good idea to require sealed diagrams.

"To me, a good idea isn't enough to make new legislation that is going to affect people," Hill said. "Good ideas are great, but there's got to be some substance in them. Especially when you're going to cause more work for somebody that might not be necessary."

The two CBSC board members Hill had conversed with earlier may have had similar thoughts, because they then began to question DSA's code and whether or not it was necessary.

"That's when the Chair said 'If you don't have a good reason to put this in there, then why don't we remove it?'" Hill said. "There was a little bit of resistance, but not much.... [The DSA member] turned and kind of looked at me like 'You just wait, buddy. Two years and we're going to have a reason.'"

This is why, despite his success in getting the requirement removed from the 2006 California Building Code, Hill remains concerned that it will come up again. "I think they're going to be back in a couple years and we'd better be prepared," he said. "It's something that we've got to keep in the back of our minds."

Defeating Doubt, Fulfilling Expectations

Before Hill attended the hearing and presented his thoughts, several people he spoke with either seemed to think he would never succeed, or came right out and told him it wouldn't

Code Language

Below are some of the code changes that were proposed to the 2006 California Building Code. Bryan Hill, engineer at A.C. Houston Lumber Co. in Roseville, CA, argued against the stricken parts during a July 2006 meeting of the California Building Standards Commission (CBSC). He succeeded in getting them eliminated.

2303.4.1.3 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss and references the corresponding truss design drawing. The truss placement diagram shall be provided as part of the truss submittal package, and with the shipment of trusses delivered to the job site. Truss placement diagrams shall not be required to bear the seal or signature of the truss designer.

Exceptions:

1. When the truss placement diagram is prepared under the direct supervision of a registered design professional, it is required to be signed and sealed.

2. [For DSA-SS and OSHPD 1, 2 and 4] ~~Truss placement diagram shall bear the seal and signature of the truss designer.~~

2303.4.3 (Relocated from 2318A.7, CBC 2001) [For DSA-SS and OSHPD 1, 2 and 4] Additional Requirements. In addition to Sections 2304.1 and 2304.2, the following requirements apply:

2. Truss Design Drawings. Each truss design drawing and ~~truss placement drawing~~ shall bear the signature and stamp or seal of the registered engineer or licensed architect responsible for the truss design.

work. Hill admits he too thought it was a long shot at first but was still determined to speak. "You've got to be there; you've got to show your face," he said. "I expected to be heard. I took two days off work. If I'm going to do that, yes, I do have some expectations."

One of Hill's expectations is that redundancy not be incorporated into his daily work. He said sealed framing plans are sufficient, trusses should be designed to match them, and if they aren't then the Building Designer should be consulted. Therefore, sealing truss placement diagrams in addition to framing plans is redundant and a waste of time and resources.

"Building construction has many items that require special attention to complete a quality job," said Hill. "But I do not think a seal on a truss placement diagram is going to help. There are other things of far more concern."

Hill said the same thing to CBSC and DSA at the public hearing within the letter he read aloud. He also identified other issues he considers to be more pressing—such as tile piles, gypsum board and building materials being stacked on truss-

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at a glance

- ❑ Bryan Hill stood before the California Building Standards Commission to defeat an amendment requiring truss placement diagrams to be sealed.
- ❑ WTCA staff realized that the Department of State Architects did not understand the professional liability that truss design engineers face when they seal layouts.
- ❑ In the end, Hill was successful in getting the requirement removed from the 2006 California Building Code.

Combining Efforts

Upon learning that the Division of the State Architect (DSA) was pushing to require seals on truss placement diagrams, WTCA immediately began working to address the issue. WTCA was concerned that the proposed requirement would become a reality members would be forced to deal with, and this was more than enough motivation to attempt to communicate with DSA.

WTCA first addressed the issue by submitting language to DSA that was more in line with what was put into the International Building Code. However, those changes to the proposed code were not accepted by DSA, and WTCA's arguments were deemed non-persuasive. At that point, WTCA staff realized DSA did not fully understand the issues involved, and that another tactic was needed in order to ensure that truss design engineers' perspectives were understood.

That was when WTCA asked Bryan Hill, engineer at A.C. Houston Lumber Co. in Roseville, CA, to assist by attending the public hearing regarding the code—where the topic of sealed truss placement diagrams could be discussed in detail. "It became clear that we were going to be most effective in our efforts if there was a personal presence at the public hearing," said Kirk Grundahl, executive director of WTCA.

Hill did agree to be that personal presence at the hearing. This proved to be effective, as did his willingness to speak up on behalf of the industry. The effort to eliminate the proposed language was successful, and remains a solid example of how much can be accomplished when WTCA staff and members work together for a common, important cause.

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es, creating point loads that the trusses were not designed to carry. Hill said he is also concerned it could become a slippery slope if DSA succeeds in requiring sealed diagrams; it could lead to the same requirement for typical commercial and residential structures. These are some of the things that motivated him to stand before CBSC and DSA and tell them why the proposed code was wrong.

His willingness to participate in the code alteration process meant that Hill, even though he's just one person, was able to prevent a troublesome code change from being passed. "It took research and writing a paper and the guts to get up and do it, but I had WTCA prompting me and telling me 'If you don't do something, you will be doing this (sealing plans) in the future.'"

Hill said he found gratification in knowing that he succeeded in doing something to help his industry and his company. "It was worth it," he said. "If you sit back and you become stagnant, the world will change around you. If you really feel strongly that something should be changed, stand up and change it." **SBC**

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