Editorial

The Future of the Profession Depends on You!

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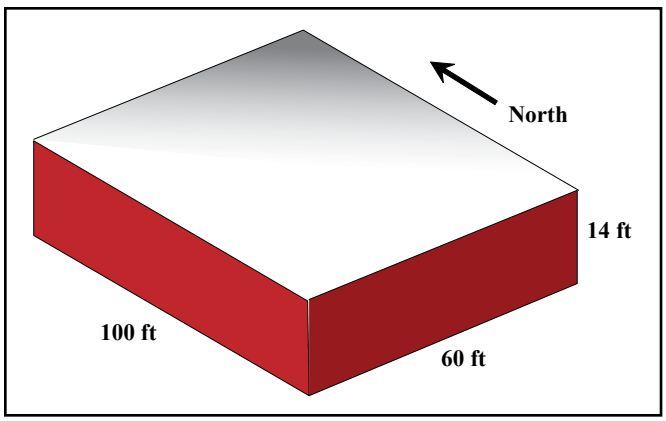
"Things are changing too fast!" "We just can't afford to keep up with all the changes!" Have you participated in this discussion recently in your office?

The profession is certainly undergoing several major changes. Some changes, such as BIM and globalization, seem inevitable and as a profession we will certainly need to adapt. However, some changes are within our control and as a profession we need to chart our own destiny. But we need to act, not just be acted upon!

"Why have we as practicing engineers allowed the codes to become so complex?"

Why have we as practicing engineers allowed the codes to become so complex? I propose that the single biggest answer is *apathy*! As practicing engineers we are just not sufficiently involved in controlling our own destiny. We have largely turned over the code writing process to researchers and academics that do not use the code on a regular basis. We have allowed "simple, safe and practical" to be replaced by "complex, exact and theoretically accurate."



The results of the latest Trial Design Problem developed by the SEI Design Practices Committee shine a giant spotlight on the problems of the current code complexity. It can't get much simpler than a rectangular, single story box building. Practicing engineers from around the world were asked to use the ASCE 7-05 provisions to determine the seismic and wind forces on this building. The results are scary! Engineers with little experience (0 to 4 years) produced seismic base shear results that that varied from 0.54 kips to 979 kips. Okay… that is to be expected since these young engineers have not yet been tempered by some years of experience. But, not so fast! Experienced engineers (5 to 40+ years) produced design wind forces that varied from 3.9 kips to 24.2 kips with a standard deviation of 42% in the results. It is instructive that those engineers who used the Simplified Wind Method in the code produced much more accurate and reliable results than those engineers who used the more "precise, theoretically accurate"Analytical Wind Method. The results of the latest trial design problem are just simply not acceptable for our profession. *You* need to get involved!

One simple way to get involved is to participate in future Trial Design Problems. These Trial Design Problems are developed to help the profession in the following ways:

- Evaluate the effectiveness of current and pending code provisions.
- Initiate dialog between practicing engineers and those who write our codes.
- Provide a tool for mentoring and training engineers within your firm.

While some changes are inevitable, the trend toward code complexity is not one of them. *You* need to make a stand and do something today. If possible, join a committee and actively participate in molding our future. If you only have a little time, making a difference can be as simple as spending an hour responding to a Trial Design Problem and discussing the results within your firm. Please make a difference today! The future of our profession depends on *you*!

The current design problem is posted at **www.SEInstitute.org**. Give an hour of your time to help us learn from your responses.▪

For a complete summary of the last trial design problem, readers are encouraged to review the White Paper located at http://content.seinstitute.org/committees/business.html.

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