



Plan Stamping - Are You at Risk?

By Ed Huston, P.E., S.E.

An article in the ASCE News discussed an engineer who stamped a set of plans prepared by another firm. The engineer reviewed the plans, checked all the calculations and determined that they were accurate. He then affixed his seal and signature to the plans. ASCE reviewed the case and determined that the engineer had not violated ASCE's Code of Ethics. The article went on to state, however, that the engineer had previously been found in violation of his state's Board of Registration Rules.

Boards of Registration adopt "plan stamping" rules to prevent the unethical practice of "selling a stamp." There are engineers who will seal a set of previously prepared plans for a fixed dollar amount per sheet. A building official I know told me that he had rejected a set of plans for a small commercial project because there was no Registered Design Professional's seal on any of the plans. The developer told my friend that he was unaware that he needed to have the drawings sealed. Two hours later the developer brought the plans back in with the civil, structural, electrical and mechanical drawings sealed by an engineer. The engineer was known to be a sole practitioner. According to the State Board's website, the engineer had been qualified as a mechanical engineer.

Engineering firms are routinely asked to seal a set of plans which were not prepared under their direct supervision. Legitimate reasons for these requests include:

- The engineer of record may have retired, gone out of business or died.
- The engineer may have refused to continue working on the project.
- The drawings may be for a franchise which develops its projects nationally and then hires engineers to modify them for local conditions, such as high seismicity or high wind conditions.

The situation can also occur when the work being performed involves minor changes to an existing structure, e.g., designing a stair between two floors of an existing building: Can the modification be shown on scanned-in drawings? Should the original Engineer of Record's seal be removed? Should a statement be added, limiting the later seal to the part of the drawing showing the modification? Another part of this conundrum is the definition of "direct supervision". Is an independent analysis of a project, and full freedom to modify the documents, the same as "direct supervision"?

The National Council for the Examination of Engineers and Surveyors (NCEES) creates "Model Laws" that its member boards can submit to their legislatures and "Model Rules" that its member boards can adopt. The Model Laws and Model Rules can be promulgated as "whole cloth", modified by the legislature or member board, or they can be ignored.

The NCEES Model Rules for plan stamping and direct supervision state that *"In circumstances where a licensee in responsible charge of the work is unavailable to complete the work, or the work is a site adaptation of a standard design plan, or the work is a design plan signed and sealed by an out-of-jurisdiction licensee, a successor licensee may take responsible charge by performing all professional services to include developing a complete design file with work or design criteria, calculations, code research, and any*

necessary and appropriate changes to the work...The successor licensee shall have control of and responsibility for the work product and the signed and sealed originals of all documents." This language, although still limiting, addresses most, but not all, of the reasons that trigger the necessity for a successor engineer.

A review of the plan stamping rules of a few states shows how diverse these rules can be. The state of Washington allows an engineer to seal a document only when he or she has directly prepared it or supervised its preparation. A successor engineer can only submit a stamped letter stating that he or she is taking responsibility for the project. The successor engineer's seal is never added to the original plans.

California takes a less Draconian approach. Not only are "Responsible Charge" and "Span of Control" clearly defined, but this state just recently added rules for successor engineers, to provide even greater clarity and give a successor engineer the guidance necessary to practice within the scope of its rules.

More enlightened, Nevada states in its rules that a successor engineer may seal documents *"Where the plans, specifications, plats or reports are not prepared under his personal supervision, if he or persons under his personal supervision review the plans, specifications, plats or reports and make tests, calculations or changes in the work as necessary for the professional engineer to determine that the work has been completed in a proper and professional manner."* Nevada also reminds successor engineers that by stamping documents they are taking full responsibility for them.

Finally, Florida has an entire chapter of its administrative code outlining the steps a successor engineer must take. *Chapter 61G15-27 Procedures for the Adoption of Another's Work* is available online and is worth reviewing. These steps include necessary documentation of "calculations, site visits and research" and communication, where possible, with the original engineer. The Florida rules state that the successor engineer is taking *"all professional and legal responsibility for the documents which he sealed and signed and can in no way exempt himself from such full responsibility."* These rules go beyond the NCEES Model Rules.

If you are registered in multiple states and practice as a successor engineer, you need to make sure that you are complying with the rules for successor engineers in each of those states. The NCSEA's Licensing Committee is hoping to work with NCEES to improve their "Model Rules" regarding successor engineers. If we are successful in modifying the "Model Rules", I suggest that NCSEA Member Organizations work with their State Boards of Registration to have these "Model Rules" adopted locally, so that we can create a level playing field. If you have an opinion on this issue, I can be reached at Huston@smithhustoninc.com.

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2006 NCSEA Winter Institute

February 10-11

The Marriott in Jacksonville, Florida

Friday Schedule

7:30-8:00 am Breakfast & Registration
 Practical Antiterrorism Design for Structural Engineers:
 8:00-12:00 pm General Considerations Seminar with Jon Schmidt (3.75 PDH)
 12:00-1:00 pm Lunch
 1:00 - 5:00 pm Explosion Effects Seminar with Jon Schmidt (3.75 PDH)

NCSEA does not guarantee that the available hours comply with the continuing education requirements in all jurisdictions.

Saturday Schedule

7:30-8:00 am Breakfast & Registration
 8:00-12:00 pm Wind Engineering with Ed Huston
 12:00-1:00 pm Lunch
 1:00-2:15 pm Wind Engineering Continued
 2:30-5:00 pm The Seismic Provisions of SEI/ASCE 7-05 with Bob Bachman (7.5 PDH total for Saturday Seminars)



*Jon Schmidt
P.E., SECB*

Practical Antiterrorism Design for Structural Engineers

with Jon Schmidt P.E., SECB

Various terrorist attacks over the last fifteen years have considerably increased the perceived risk of similar incidents at other facilities. Today it is important that "ordinary" structural engineers have at least some awareness and capability in this area, especially since a vehicle bomb, the most popular terrorist weapon, can damage or destroy not only the target building, but also others nearby. Simplified analysis and design methodologies and user-friendly computer programs now make this possible. The morning session on General Considerations will address applicable standards and guidelines, risk assessment, non-structural measures, and progressive collapse. The afternoon session on Explosion Effects will cover blast loading, element response limits, vulnerability assessment, dynamic analysis, and glazing evaluation.

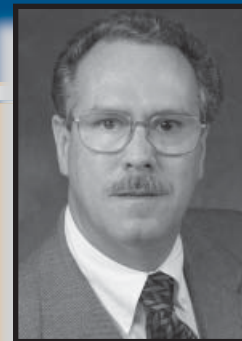
Wind Engineering

with Ed Huston P.E., S.E.

The Wind Engineering Seminar will present the fast, simple methodology developed by the Structural Engineers Association of Washington (SEAW) to determine the wind forces for building design. This methodology will then be compared to the IBC Simplified method and the ASCE 7 "All Heights" method through side-by-side analysis of 3 different buildings. SEAW published ATC-60, SEAW Commentary on Wind Code Provisions, in cooperation with the Applied Technology Council (ATC), along with the SEAW RSM-03, SEAW's Handbook of a Rapid Solution Methodology™ for Wind Design. These documents are the product of more than 20,000 hours of effort by the SEAW Wind Engineering Committee. They have been written by practicing structural engineers, for practicing structural engineers.



*Bob Bachman
S.E.*



*Ed Huston
P.E., S.E.*

The Seismic Provisions of SEI/ASCE 7-05

with Bob Bachman S.E.

The seismic provisions of SEI/ASCE Standard 7-05, Minimum Design Loads for Building and Other Structures (ASCE 7-05), including Supplement 1, have been adopted as the seismic requirements of the 2006 International Building Code (2006 IBC) and the 2006 NFPA 5000 Building Construction and Safety Code (2006 NFPA 5000). This presentation will include a history of the development of ASCE 7-05, the basis of the changes that were made from ASCE 7-02, and the overall organization found in ASCE 7-05, with cross references back to ASCE 7-02. There will be a review of requirements for establishing design ground motions, as well as seismic design loads for buildings, nonstructural components and nonbuilding structures.

Registration Options Include (all seminars include lunch):

Friday Morning Seminar.....\$150	Friday All Day Seminar.....\$250
Friday Afternoon Seminar.....\$150	Saturday All Day Seminar.....\$250

Visit www.ncsea.com/winterinstitute for registration form & additional information, or call 312.649.4600 x 200.

