# Council of American Structural Engineers Position Statement on Separate Structural Engineering Licensure

Approved by the CASE Executive Committee on August 21, 2009

## **Position**

The Council of American Structural Engineers (CASE), a Coalition of the American Council of Engineering Companies, supports separate licensure for structural engineers. Separate licensure shall protect the public safety while not hindering the ability of current appropriately qualified, licensed professional civil engineers to design structures appropriate to their expertise. CASE encourages all appropriately qualified civil engineers practicing structural engineering to obtain a structural engineering license and supports the goal that all appropriately qualified civil engineers practicing structural engineering do so, if such a license is available in the state(s) in which they are practicing.

## **Issues**

Some of the issues that need to be addressed in the adoption of structural engineering licensure include:

- The requirements for licensure should address educational, experience and examination standards.
- The requirements for licensure should be as consistent as possible from state to state to allow appropriately qualified structural engineers to more easily practice in other states.
- The provisions for licensure should permit those currently licensed engineers with appropriate education and/or experience to continue to design structures for which they have expertise without requiring additional examination.
- Each jurisdiction will need to adopt appropriate threshold criteria for building size and/or type for which design by a licensed structural engineer is required.

# Rationale

The field of civil engineering encompasses a broad spectrum of engineering concepts from traffic and surveying, water and wastewater treatment, and municipal and utility engineering to building and bridge design. The specialty of structural engineering within this spectrum is unique in that it directly affects the life safety of the general public.

A bachelor's degree in civil engineering gives its recipient an introduction to the civil engineering spectrum. The reduction in the number of credit hours needed to acquire a bachelor's degree reduces the number available to complete structural engineering coursework. In some instances, it is possible to obtain a bachelor's degree in civil engineering without taking any courses in structural design. The design of certain structures requires more than a basic knowledge of structural engineering principles.

The requirement for advanced knowledge has been acknowledged sporadically across the country. This sporadic adoption lacks uniformity from state to state and makes licensure by comity or reciprocity difficult.

- The structural engineering specialty within civil engineering has been recognized by a number of states, starting with Illinois in 1915, with the implementation of separate licensure laws.
- The State of California requires a specialized licensing exam that incorporates structural and seismic design principles in order to obtain a professional civil engineering license. Following sufficient experience, a separate specialized exam is required to obtain a structural engineering license.
- Washington and several other states require additional examination before an engineer can practice structural engineering or use the title "structural engineer". These states have differing education, experience, and examination requirements.
- The National Council of Examiners for Engineering and Surveying has adopted a "Model Law Structural Engineer" credential that requires a minimum level of coursework and experience before it can be earned.

The effort to pass structural engineering licensure requirements in all jurisdictions is a worthy commitment that will require a concerted effort by the engineering community in each jurisdiction.

## **Business Practice Considerations**

CASE would like to take this opportunity to also discuss business practice issues related to practice in multiple states. These issues apply whether or not the idea of separate structural engineering licensing takes hold in a given state.

The rules and regulations governing the practice of engineering vary from state to state. CASE urges its member firms to review the state statutes and board rules that are applicable to the projects on which they work. Individual professional engineers must be licensed to practice in the state where a project is located, and, where applicable, corporations must obtain a certificate of authority from the local board of engineering. Failure to do so can result in fines and citations to both the individual and the firm. Some states go as far as to refuse to recognize a contract between a client and unlicensed individual or firm and will require that the unlicensed individual or firm return any compensation received from the client, even if the client has benefited from the services.

The states define very broadly the "practice of engineering" and, in so doing, they expand their requirements for licensure. As an example, some states expressly include the provision of expert witness services within their definitions of the "practice of engineering". State licensure is not only required for the *performance* of professional services; it is also required for *offers* to perform engineering services. For example, if you send a proposal in response to an RFP and you are not licensed in the state where the project is located, you may be in violation of that state's rules of professional practice.

Unlicensed practice is not the only risk that firms face when dealing with the various state boards of professional registration. Boards have specific requirements for licensed individuals acting in responsible charge of projects. For example, boards do not permit the cursory review of instruments of service or the affixing of a stamp or seal by a

licensed professional engineer if the licensed professional did not personally supervise and direct the work throughout the course of the project. In addition, the boards have very strict rules concerning what types of documents should be signed and sealed by the licensed professional in responsible charge. Whether the document is a plan, specification, or report, and whether the client is public or private, most states require a signature, date, and stamp or seal on all engineering documents.

All state boards have websites on which they post their rules and regulations. Before your next project, review the local requirements that govern your professional practice and stay out of the disciplinary sections of the states' board newsletters. Further information on state-by state requirements can be found by visiting ACEC's Contracts Central site (ACEC's Contracts Central).