



A Structural Engineering Practice Act for the State of Tennessee

IN A NUTSHELL

- Need for greater public safety in the structural design of significant buildings and structures
- Those presently qualified to practice structural engineering will remain able to do so
- Two year window for transitioning professionals to apply for Structural Engineer (SE) license
- Minimal administrative changes for Tennessee Board of Architectural and Engineering Examiners

STRUCTURAL ENGINEERING LICENSE ACT FOR TENNESSEE

The current Tennessee Professional Engineer (PE) law does not differentiate between the various engineering disciplines. This allows licensed engineers to practice in fields beyond that which they have demonstrated competence through formal education, experience, and testing.

A proposal by the Tennessee Structural Engineers Association (TNSEA) will better define the practice of structural engineering by imposing more stringent experience and testing requirements on those licensed to perform structural design of significant structures. The proposed law will also define those buildings and structures that are significant enough to warrant the added expertise of structural engineers.

Structural design of hospitals, schools, and high-occupancy buildings directly affects public safety, and building code requirements for their structural design are consequently elevated. A corresponding increase in the level of competence of engineers designing these structures is warranted.

Why Is A Structural Engineering Practice Act Necessary?

Modern structures are becoming increasingly more complex, requiring higher levels of competence and experience for their structural design. This is especially true of structures housing critical emergency facilities or servicing large numbers of people.

More and more states around the country are acknowledging this trend by requiring more stringent credentials from those licensed to practice structural engineering. Reasons for needing to improve structural practice include:

- *Education Requirements:* Bachelor of Science degree requirements have steadily decreased from 150 semester hours to as little as 124 hours, placing more importance on work experience.
- *Complex Codes:* Structural engineering design and building code requirements have become increasingly complex
- *Computerization:* Use of advanced software by less competent engineers to design structures
- *Hidden Problems in Existing Buildings:* Many potential problems will only be evident when an earthquake, high wind or design snow load is applied
- *Plan Checking:* Many jurisdictions do not have the resources to perform sufficient structural plan reviews. Reliance on the “engineers stamp” does not always assure quality performance
- *Insurance Costs:* Poor design and construction can affect many different insurance policies

How Will the Current Practice of Structural Engineering Change?

Those presently licensed as a PE in Tennessee and competent in the areas defined by the act will continue to be able to practice structural engineering. These individuals will simply need to submit an affidavit attesting to their competence and experience. Future applicants for licensure as an SE will be subject to more stringent experience and testing requirements than required by the current law. Only individuals licensed as an SE will be allowed to design significant structures, as defined by the new law.

How Will It Be Implemented?

Beginning on the effective date of the legislation, individuals holding a valid PE license in Tennessee who also desire to obtain an SE license will have two years to make application to the Board of Architectural and Engineering Examiners.

After the effective date of the legislation, licensing as an SE in Tennessee will follow the requirements of the proposed new law.

Benefits

- Increased public safety for the structural design of significant buildings and structures
- Clearly defines the responsibilities for the practice of structural engineering
- Improves upon the standards established by the State of Tennessee for the practice of structural engineering and the qualifications of license holders.

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