



Volunteer professional organizations occupy a significant role in the business, education, regulation and licensure of structural engineering. These groups provide a positive influence from the professionals' vantage on the laws, integrity and quality of our careers and act as stewards for the profession. Over the years, several organizations focusing on structural engineering have addressed separately the many issues surrounding the practice.

There are four main groups representing structural engineering in the United States: the Structural Engineering Institute (SEI) of the American Society of Civil Engineers (ASCE), the National Council of Structural Engineers Associations (NCSEA), the Structural Engineering Certification Board (SECB), and the Council of American Structural Engineers (CASE) of the American Council of Engineering Companies (ACEC). Each organization has a slightly different focus on structural engineering arising from needs within the profession. They have many commonalities in vision and passion. One of these common issues is structural engineering licensure.

A few visionaries in the profession conceived the idea to form a coalition to improve coordination and collaboration on issues pertaining to structural engineering licensure. It was thought that rather than running over each other in pursuing a common goal, combining the efforts of the four organizations can provide the greatest benefit to the profession. A cord of three strands, or in this case four strands, cannot be easily broken.

The Structural Engineering Licensure Coalition (SELC) was formed by SEI, NCSEA, SECB and CASE in 2012 to champion the cause of structural engineering licensure and to build a consensus among all stakeholders. The mission of SELC is to serve as a united voice for the structural engineering profession, for the promotion of structural engineering licensure nationwide.

SELC has adopted the following positions:

- 1) SELC endorses the Model Law Structural Engineer (MLSE) standard developed by the National Council of Examiners for Engineering and Surveying (NCEES) in accordance with the American National Standards Institute (ANSI) consensus process as establishing the minimum set of qualifications for a licensed Structural Engineer (S.E.).
- 2) SELC advocates that jurisdictions require S.E. licensure for anyone who provides structural engineering services for designated structures. SELC recommends that each licensing board adopt rules to define appropriate thresholds for these structures.
- 3) SELC recognizes that, when S.E. licensure is enacted in each jurisdiction, it is important to ensure that an equitable transition process, as defined by the licensing board, is available for any individual who has been practicing structural engineering as a licensed Professional Engineer (P.E.).
- 4) SELC encourages all jurisdictions to incorporate these provisions into their current engineering licensure laws, adapting them to their unique individual situations. SELC supports the modification of existing P.E. statutes and regulations to implement S.E. licensure as a post-P.E. credential.

The SELC is led by a steering committee comprised of two members of each organization, one of the members being in a board position of that organization. There are two face-to-face meetings each year and several teleconferences to coordinate action toward the goals of the Coalition.

The goals of SELC include the following:

- 1) Develop supporting rationale for structural engineering licensure. This includes developing case studies and other supporting documentation.
- 2) Communicate the need and rationale for structural engineering licensure in all jurisdictions. Articles in journals, presentations and the recently launched website (www.selicensure.org) all contribute to this goal.
- 3) Enhance the visibility of structural engineering licensure on the national level. This includes communicating with other professional groups such as National Society of Professional Engineers (NSPE) and the National Council of Examiners for Engineering and Surveying (NCEES).

SELC recognizes the vital role that professional licensure plays in protecting the public, and unanimously affirms that the licensure of structural engineers is a critical aspect of fulfilling this responsibility. SELC envisions a future with structural engineering licensure in every jurisdiction, thereby improving the health, safety, and welfare of the public as required by our professional charge.

Structural engineering licensure is already established in many parts of the United States. The American National Standards Institute (ANSI) consensus standard for structural engineering licensure and the nationally adopted structural engineering examination administered by NCEES form a solid foundation on which to base the support and mechanisms necessary to initiate structural engineering licensure in all jurisdictions. By endorsing the MLSE and the ANSI standard, SELC believes in promoting common standards in all jurisdictions for structural engineering education, experience, and licensure.

For example, a key component of structural engineering licensure is the NCEES 16-hour structural examination. The 16-hour structural examination is an improvement over the NCEES 8-hour exam required by many jurisdictions and, as such, is a key differentiator for determining levels of minimal competency. The NCEES 8-hour examination for the structural engineering discipline consists of 80 multiple choice questions covering the broad spectrum of disciplines within civil engineering, with a focus of less than 40 of those 80 questions on structural engineering. When the 16-hour exam was developed, it was determined that the 80 multiple choice questions alone would not be sufficient to cover the essential items required for a minimally competent structural engineer, even if all of the questions were focused on structural engineering. The 16-hour exam includes 80 multiple choice questions, but also 8 hours of essay questions, all focused on structural engineering, that serve to test not only knowledge, but also judgment. This examination raises the bar for structural engineering and, as such, improves the level of competency serving the public.

SELC is taking action toward accomplishment of these goals and, in the process, strengthening our voice and improving the standing of structural engineering across the country. With collaboration between the different organizations and a strengthened focus on what is most important, our world will be safer and we, as structural engineers, will continue to provide a firm foundation and secure framework within which the world functions. ■



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