COLUMNS<br/>Issue Number 10Insights into Structural Engineering<br/>Copyright © 2015 by Stan R. CaldwellSpring 2015

## Structural Engineering Certification ...

There are more than 70,000 attorneys in Texas. About 10% are Board Certified in one or more of 21 recognized specialties. The Texas Board of Legal Specialization (TBLS) was established as a public agency in 1974 *"to promote the availability, accessibility, and quality of the services of attorneys to the public in particular areas of the law … and to advance the standards of the legal profession."* The requirements for certification include:

- have a minimum of 5 years of practice, with 3 years of substantial involvement in a specialty area of law
- submit at least 10 qualified, vetted references
- provide extensive, relevant experience documentation
- pass a comprehensive, day-long, specialty area examination
- annually complete approved continuing legal education course requirements

Nationwide, there are more than 1,000,000 medical doctors. About 80% are Board Certified in one or more of 24 recognized specialties by the American Board of Medical Specialties (ABMS) through its affiliated certification boards. ABMS was established in 1933. The goals and the certification requirements of ABMS are similar to those of TBLS. However, unlike TBLS, ABMS is a private, non-profit organization. In medicine, board certification represents regulation of the profession by the profession.

Based on recent circulation statistics for STRUCTURE Magazine, there are more than 32,000 structural engineers nationwide, including more than 2,000 in Texas. About 3% are "Certified in the Practice of Structural Engineering" by the Structural Engineering Certification Board (SECB), which was 2005 established in "to identify those professional engineers with the additional education, experience, and skills that are

necessary for the competent practice of structural engineering." Like ABMS, Board Certification by SECB represents regulation of the profession by the profession. The mission of SECB can be summarized in 3 bullets:



- to promote structural engineering licensure in all jurisdictions
- to determine the level of unique and additional education, examination, and experience necessary to competently practice the science and art of structural engineering
- to certify engineers with those unique and additional qualities necessary to perform structural engineering

The requirements for SECB certification are at least as rigorous as those for the other professions:

- hold an ABET-accredited engineering degree, with at least 36 semester hours in at least 6 of 9 designated structural engineering subjects, confirmed through college transcripts
- demonstrate a minimum of 4 years of structural engineering experience, fully documented for each engagement
- be a licensed professional engineer in good standing in at least one jurisdiction
- pass the 16-hour NCEES Structural Engineering Examination
- submit at least 3 references from engineers that are certified by SECB
- currently practice structural engineering
- annually complete at least 15 hours of continuing education involving structural engineering subjects

Considering the consequences of structural failures, identifying qualified structural engineers is vital to public health, safety, and welfare. However, only 11 jurisdictions currently offer some form of structural engineering licensure and Texas is not one of them. Until structural engineers can put "S.E." after their names in every jurisdiction, having "SECB" after their names will be an important credential.

The participation rate for structural engineering certification is substantially lower than for the other professions, but SECB is still a relatively

young organization. With time, SECB certification should become increasingly important, both to the public and to the profession. Additional information on SECB is available at this website: <u>http://www.secertboard.org</u>.

 STAN R. CALDWELL, P.E., SECB
 Structural Engineering Consultant
 to Attorneys & Insurers

 stancaldwellpe@gmail.com
 214-724-7101
 www.stancaldwellpe.com
 Texas Firm Number F-14866