

# **ADMINISTRATIVE RULES OF THE BOARD OF PROFESSIONAL ENGINEERING EFFECTIVE: [ 8/1/17 ]**

## **PART 1 THE BOARD OF PROFESSIONAL ENGINEERING**

### **1.1 The Board's Purpose**

The Vermont Board of Professional Engineering (the "Board") has been created and given powers by Vermont law. Its primary purpose is to protect the public welfare and to safeguard life, health and property through the regulation of the practice of professional engineering. The Board does this by rulemaking, setting standards, evaluating applicants' qualifications for licensure, and when necessary, disciplining licensees for unprofessional conduct or referring unlicensed persons practicing professional engineering to enforcement authorities.

### **1.2 General Information about the Board**

Copies of the Board's governing statute and additional information about the Board and its procedures may be obtained by contacting the State of Vermont Office of Professional Regulation (the "Office") at (802) 828-1505 or at [www.sec.state.vt.us/professional-regulation](http://www.sec.state.vt.us/professional-regulation).

### **1.3 Laws That Govern the Board**

The laws relating specifically to the Board, licensing of professional engineers, and certification of engineer interns can be found in Title 26, Chapter 20, Vermont Statutes Annotated. (V.S.A.). Other laws relating to the Board include the "Administrative Procedure Act" (3 V.S.A. §§ 801-849), the "Vermont Open Meeting Law" (1 V.S.A. §§ 310-314), the "Law of Professional Regulation" (3 V.S.A. §§ 121-132), and the "Public Records Act" (1 V.S.A. §§ 315-320). These laws establish rights for applicants, licensed engineers, and members of the public. The Vermont Statutes Online are available on the internet at <http://legislature.vermont.gov/statutes/>.

### **1.4 Initiating a Complaint**

The Board follows the current complaint procedure set forth in the Administrative Rules governing the Office. A copy of the complaint procedure is available at [www.sec.state.vt.us/professional-regulation](http://www.sec.state.vt.us/professional-regulation).

### **1.5 Confidentiality**

The Board follows the confidentiality provisions of the Law of Professional Regulation, 3 V.S.A. § 131. All identifying information related to complaints remains confidential until disciplinary charges are filed.

### **1.6 Appeals**

A party aggrieved by a final decision of the Board in a disciplinary matter may, within 30 days of the decision, appeal that decision by filing a notice of appeal with the Director of Professional Regulation. Information about the appeal process may be obtained from the Office.

## **PART 2      RULES FOR APPLICANTS FOR LICENSURE, LICENSEES, AND ENGINEER INTERNS**

### **2.1 Biennial License Renewal**

Licenses are renewed on a two-year cycle. All licenses expire on July 31<sup>st</sup> of even years unless renewed. Before the expiration date, the Office will send a renewal notice to the licensee's email address of record. Non-receipt of renewal notice(s) shall not excuse a licensee from maintaining active licensure. Licensure status and expiration dates may be verified through an online lookup tool at <https://www.sec.state.vt.us/professional-regulation.aspx>. If the renewal application and fee are not received by the expiration date, the license will expire automatically and may be subject to penalties upon reinstatement as set out in 3 V.S.A. § 127(d).

### **2.2 Contact Information and Change of Name**

It is the responsibility of each applicant, engineer intern, and licensee to notify the Office of any name changes and to maintain current contact information on file with the Office, including mailing address and email address.

### **2.3 Applications**

- (a) Applications for licensure, renewal, or examination may be obtained from the Office. Only completed applications will be considered by the Board. Applicable fees must accompany the application.
- (b) Applicants who fail to pass all portions of an examination within two years of initial approval to sit for the examination must reapply. Should an applicant fail the Principles and Practice examination three times, the applicant will be eligible to reapply only upon demonstrating to the Board an additional two years of acceptable progressive engineering experience, accomplished subsequent to the last failed examination.
- (c) An applicant for licensure who has not been actively engaged in the practice of engineering within two years of applying to the Board may be required to submit additional information establishing current competency and may be required to retake and pass the examination in the Principles and Practice of Engineering in the specialty discipline sought.
- (d) The Board requires technical references from each applicant for licensure as a professional engineer, which shall be supplied in a form and format specified by the Board. References shall

be from supervisors or peers thoroughly familiar with the applicant’s experience and shall be sufficient in number to verify all of the progressive engineering experience required for licensure. Not fewer than two reference providers shall be professional engineers licensed in good standing in any jurisdiction.

## **2.4 Reinstatement**

A petitioner for reinstatement of a license that has been expired for two years or more shall submit a new application, meet all requirements for licensure at the time the new application is filed, and provide evidence satisfactory to the Board of thirty professional development hours (“PDHs”) completed within the two years immediately preceding the date of the new application.

## **2.5 Professional Engineering Disciplines**

(a) The Board issues a license indicating a specialty discipline pursuant to 26 V.S.A. §§ 1182a and 1182b. A table of recognized specialties available for new applicants is available from the Board’s website. A professional engineer shall practice only within his or her licensed specialty discipline and area of competence.

(b) Applicants who meet the qualifications for multiple specialty disciplines may apply for more than one specialty discipline in the same application and for a single application fee. A licensee wishing to add an additional discipline to an existing license shall submit a new application with the application fee. The renewal fee is unaffected by the number of specialty disciplines included within a particular license.

## **2.6 Seals**

Each licensee shall obtain a seal bearing the licensee’s name, specialty discipline, license number, and the title “Licensed Professional Engineer.” The seal shall be substantially of the following format, and shall be approximately one-and-one-half inches in diameter. The seal may be a wet seal, embossed seal, or an electronic format. Each licensee is responsible for managing the use and security of his or her seal and signature.



## **2.7 Sealing of Instruments of Service**

(a) Sealing means the application of the seal and the signature of the licensee. Manual or electronic forms of the seal and signature are acceptable.

(b) The seal and signature of a licensee indicate that the instruments of service were prepared under the licensee's responsible charge as defined at 26 V.S.A. §1161(8) and that:

(1) the licensee takes professional responsibility for the work;

(2) to the best of the licensee's knowledge, the work represented in the document conforms to applicable codes in effect at the time of submission;

(3) the work has been prepared in conformance with normal and customary standards of practice; and

(4) the work has been completed with due regard to the protection of the public health, safety, and welfare.

(c) A licensee may sign and seal instruments of service that have been prepared by others not under the licensee's responsible charge only if the sealing licensee has performed a full and independent review and assumes full professional responsibility for the work.

(d) Instruments of service, as defined at 26 V.S.A. §1161(4), issued by a licensee, including those intended for submission to an authority having jurisdiction shall be signed and sealed by the licensee. For the purposes of this paragraph, exchanging working documents for the purposes of coordinating or developing the work is not considered an instrument of service and may not need to be signed and sealed.

(e) Signed and sealed instruments of service shall be clearly labeled as to their purpose or intended use, for example: "Preliminary," "Final," "For Permitting," "Not for Construction," or "For Construction."

## **2.8 Engineering Degrees Recognized by the Board**

In addition to the ABET-accredited degrees described in §1182a, The Board recognizes the following degrees as substantially equivalent to an ABET-accredited degree for purposes of applying through the alternate route to licensure set out at 26 VSA § 1182a(b)(6):

(a) Washington Accord Bachelor's Degree in Engineering: A foreign bachelor's degree in engineering is considered substantially equivalent to an ABET-accredited bachelor's degree in engineering if the foreign degree program was recognized under the Washington Accord at the time of completion. Information about countries and institutions included in the Washington

Accord can be found at [www.ieagreements.org](http://www.ieagreements.org). The applicant shall provide confirmation that the degree program complied with the Washington Accord at time of graduation.

(b) Non-ABET Degree in Engineering or Engineering Technology: A degree in engineering or engineering technology that is not accredited by ABET may be recognized as substantially equivalent to an ABET-accredited degree in engineering or engineering technology at the discretion of the Board. Such degree programs shall be reviewed by the National Council of Examiners for Engineering and Surveying (“NCEES”) Credentials Evaluation Service or other evaluation service approved by the Board. A copy of the evaluation report must be submitted to the Board by the evaluation service.

## **2.9 Examinations**

(a) Examinations are administered by the National Council of Examiners for Engineering and Surveying (NCEES). Once an applicant has been approved by the Board to take the Fundamentals of Engineering (FE) or Principles and Practice (PE) examination, the Board will forward that approval to NCEES. Once approved for examination, the applicant is responsible for registering for the exam with NCEES and paying any examination fees.

(b) Eligibility for Examination:

(1) Fundamentals of Engineering Examination (FE): To be approved by the Board to sit for the exam, applicants shall meet (i), (ii), or (iii), below, at the time of application:

(i) Applicant has completed at least six full-time semesters, or the equivalent thereto, of a bachelor's-level curriculum in engineering or engineering technology that is accredited by the Accreditation Board for Engineering and Technology ("ABET") or deemed substantially equivalent to an ABET-accredited degree in accordance with Section 2.8 of these Rules.

(ii) Applicant is a graduate of a four-year bachelor's level curriculum in engineering or engineering technology. Applicant shall have the school submit proof of graduation to the Board. If the curriculum is not accredited by the Accreditation Board for Engineering and Technology, then the applicant shall also have the school forward an English-language copy of the applicant's transcript to the board.

(iii) Applicant has completed at least six years of progressive engineering experience in accordance with Section 2.10 of these Rules that indicates to the Board that the applicant is developing engineering knowledge and experience suitable for eventual licensure. Applicant shall submit a detailed description of this work experience for evaluation by the Board, along with verification of that experience by the applicant's supervisor.

(2) Principles and Practice Examination: To be approved by the board to sit for the exam, applicants shall meet all requirements for licensure set out by 26 V.S.A. § 1182a at the time of application.

(c) Recognized Examinations:

(1) Fundamentals of Engineering Examination: The Board recognizes the NCEES Fundamentals of Engineering (“FE”) examination and adopts the NCEES recommended passing score, and other examinations considered substantially equivalent by the Board. Information on the availability of the FE examination can be found on the NCEES website, [www.ncees.org](http://www.ncees.org).

(2) Principles and Practice of Engineering Examination: The Board recognizes the NCEES Principles and Practice of Engineering (“PE”) examination in the applicable engineering discipline and adopts the NCEES recommended passing score, and other exams recognized as substantially equivalent by the Board. Information on the availability of the PE examination can be found on the NCEES website, [www.ncees.org](http://www.ncees.org).

(3) The Board recognizes the following PE examinations for the structural specialty discipline:

(a.) For Structural 1:

- (i) NCEES Civil examination taken prior to July 1, 2012<sup>\*</sup>; or
- (ii) 8-hour NCEES Structural 1 examination (discontinued in 2010); or
- (iii) other examinations considered substantially equivalent by the Board.

(b.) For Structural 2:

- (i) 16-hour NCEES Structural examination; or
- (ii) 8-hour NCEES Structural 1 exam plus 8-hour NCEES Structural 2 exam (both discontinued in 2010); or
- (iii) NCEES Civil examination plus 8-hour NCEES Structural 2 exam (discontinued in 2010); or
- (iv) 16-hour Western States Structural Engineering Exam; or
- (v) other examinations considered substantially equivalent by the Board.

## **2.10 Progressive Engineering Experience**

For experience to be acceptable to the Board as progressive engineering experience, it must meet all of the following requirements:

- (a) Experience shall include demonstration of knowledge of engineering mathematics, physical and applied science, properties of materials, the fundamental principles of engineering design, and the application of engineering principles in the practical solution of engineering problems.
- (b) Activities such as drafting, surveying, construction support, testing, and inspection may be acceptable engineering experience if the applicant credibly demonstrates progressive engineering responsibility and the direct application of engineering principles.
- (c) Experience shall be progressive to indicate that it is of increasing difficulty over time, requiring greater responsibility, and demonstrating maturation of engineering judgment and increased depth of technical knowledge.
- (d) Experience shall not be obtained in a manner that constitutes unauthorized practice as defined in 26 V.S.A. § 1161(11), nor in a manner inconsistent with the laws, rules, and standards of the jurisdiction where the experience is obtained.
- (e) Experience shall be obtained under the supervision of a licensed professional engineer. The Board in its sole discretion may recognize experience otherwise obtained only if the applicant supplies an explanation demonstrating that the experience should be considered as though obtained under the supervision of a licensed professional engineer.
- (f) Acceptable experience may include engineering research in an academic setting and teaching engineering analysis or design courses at the college level.
- (g) Experience shall not be anticipated. The experience must have been obtained by the time of the application.
- (h) The Board may require supplemental experience, education, or examination by any applicant exhibiting disruption in progressive engineering experience within the four years preceding application.
- (i) Technician-level activities that do not rise to the level of engineering experience as defined in Rule 2.10(a,b,c), such as drafting, surveying, testing, and inspection, may be accepted in satisfaction of a portion of the progressive engineering experience, provided the applicant satisfactorily documents how the technician-level activities contributed to professional development.

## 2.11 Continuing Professional Competency

Every licensee, except those renewing for the first time, shall meet the following continuing professional competency requirements as a condition of license renewal:

(a) Every licensee shall obtain the equivalent of 30 professional development hours (“PDHs”) prior to license renewal. A PDH is one contact hour (60 minutes) of instruction or presentation. These PDHs shall be obtained during the three years preceding the renewal date. Each PDH can be counted toward only one renewal.

(b) A qualifying course or activity shall have content areas aimed at maintaining, improving, or expanding the skills set and knowledge relevant to the licensee’s field and methods of engineering practice, such as coursework related to the following:

- (1) technical topics directly related to the practice of engineering;
- (2) awareness of professional practice ethical concerns and conflicts;
- (3) an understanding of standards of practice or care; or
- (4) engineering management.

(c) The following methods of attaining PDHs are acceptable:

- (1) college courses (10 PDHs per semester credit; 6 PDHs per quarter credit);
- (2) continuing education courses, seminars, presentations, and workshops, including those provided by employers outside of normal on-the-job training;
- (3) teaching or presenting items in subsections 1 and 2, above. (PDHs may be earned at double the presentation length; however, repetitions of the same material may not be credited, and full-time faculty may not claim teaching credit associated with their regular duties);
- (4) authoring published papers, articles, or books related to the licensee’s specialty discipline or practice (5 PDHs each, not to exceed 15 PDHs in a biennial period);
- (5) active participation in development of engineering codes and standards (up to 2 PDHs per code or standard); and
- (6) PDHs for activities 1-3 above may be earned in person, through the internet, correspondence, by television, or by pre-recorded media.

## **2.12 Evidence of Compliance with Continuing Professional Competency**

(a) The licensee shall document successful completion of the required number of PDHs during the biennial renewal period preceding renewal. Required records include, but are not limited to:

(1) a log showing the type of activity claimed, sponsoring organization, location, duration, presenter, and PDHs earned;

(2) attendance verification records in the form of completion certificates or other documents verifying attendance/participation;

(3) program syllabi, outlines, handouts or other evidence of course or activity content.

(b) Records shall be maintained for the prior two biennial renewal periods.

## **2.13 Audit of Compliance with Continuing Professional Competency**

The Board may at any time audit licensees, or a randomized subset of licensees, to verify compliance with continuing professional competency requirements. At its discretion, the Board may also audit previously-disciplined licensees, late renewing licensees, and licensees who in any of the preceding two biennial renewal periods were initially found not to have met continuing education renewal requirements. An audit notice will be sent to licensees selected. The subject of an audit shall, within 30 days of the date of the audit notice, furnish documentary evidence showing completion of the requirements for the audited reporting period.