
Florida Laws and Rules and Professional Ethics for PEs

(3/1/2017 to 2/28/2019)

Course No: FL2-002

Credit: 2 PDH

Gilbert Gedeon, PE



Continuing Education and Development, Inc.
9 Greyridge Farm Court
Stony Point, NY 10980

P: (877) 322-5800

F: (877) 322-4774

info@cedengineering.com

Table of Contents

Chapter 1: Overview of the Florida Laws and Rules	4
Florida Statutes (F.S.)_____	4
Florida Administrative Code (F.A.C.)_____	4
Florida Board of Professional Engineers (FBPE)_____	5
Florida Engineers Management Corporation (FEMC)_____	5
Chapter 2: Rules Affected in the F.A.C. 61G15 in the Preceding Biennium	6
61G15-18.011 – Definitions_____	6
61G15-20.0010 – Application for Licensure by Examination_____	6
61G15-20.0015 – Application for Licensure by Endorsement_____	7
61G15-24.001 – Schedule of Fees_____	8
61G15-32.002 – Definitions_____	9
61G15-32.008 – Design of Fire Alarms and Detection Systems_____	10
61G15-32.009 – Design of Fine Water Spray (Mist) Fire Suppression and Control Systems_____	12
61G15-35.003 – Qualification Program for Special Inspectors of Threshold Buildings_____	12
Chapter 3: Changes to F.S. Chapters 455 and 471 in the Preceding Biennium	14
455.2281 – Unlicensed activities; fees; disposition_____	14
Chapter 4: Engineering Ethics and Principles of Professional Responsibility	15
How should you hold the utmost safety, health, and welfare of the public.....	16
What does it mean to perform services only in the areas of your competence?_____	16
Under what conditions you may issue public statements?_____	17
How should you represent each employer or client as a faithful trustee.....	17
How do you build your professional reputation on the merit of your services.....	18
How should you handle proprietary information and intellectual property rights.....	19

Table of Contents (Cont'd)

Chapter 5: Ethical and Disciplinary Case Studies	20
FEMC Case No: 2013021397	21
FEMC Case No: 2012003988	21
FEMC Case No: 2011042037	22
FEMC Case No: 2012004836	22
FEMC Case No: 2013000391	23
FEMC Case No: 2014039414	23
Appendix A: Answers to Study Questions	24
Appendix B: References	27
Appendix C: Course Inquiry Form	28

Chapter 1

Overview of the Florida Laws and Rules

The practice of engineering in the State of Florida is ultimately regulated by the Florida Laws and Rules stipulated in the Florida Statutes, Chapters 455 and 471, as well as the Florida Administrative Code, 61G15.

Florida Statutes (F.S.)

The Florida Statutes are a permanent collection of state laws organized by subject area into a code made up of titles, chapters, parts, and sections. The Florida Statutes are updated annually by laws that create, amend, or repeal statutory material.

The Florida Legislature found that it was necessary in the interest of public health and safety to regulate the practice of engineering in the State of Florida and thus created Chapter 471, F.S., "Engineering". Under this law the Florida Board of Professional Engineers is responsible for reviewing applications, administering examinations, licensing qualified applicants, and regulating the practice of engineering throughout the state.

While Chapter 471 is specific to the field of engineering, Chapter 455 is broader in nature and encompasses all business and professional regulations in general. As such, only pertinent sections of Chapter 455, F.S., apply to the engineering community.

Florida Administrative Code (F.A.C.)

The Florida Administrative Code is a compilation of the rules and regulations of the Florida regulatory agencies. Its counterpart in the federal system is the *Code of Federal Regulations*. It is organized by titles with each title number representing a department, commission, board or other agency. The set has a single comprehensive index volume. The spines of the volumes indicate which titles are included.

The F.A.C. states the rule followed by statutory authority, implementation and a history of the rule. The set is annotated with decisions of the Federal courts, State appellate courts, State Attorney General opinions, final and recommended orders of the Division of Administrative Hearings and final agency orders construing the rules Citations for the Florida Bar Journal and the law reviews of Florida State, the University of Florida, the University of Miami, as well as Stetson and Nova. At the end of each rule in the F.A.C., a history note is located in the italicized text which begins with the words "Specific Authority". The history note indicates when the rule has been modified, renumbered, or repealed. The F.A.C. is updated each month.

Study Question 1:

List the regulations that govern the practice of engineering in the State of Florida.

Similarly, Section 61G15 of the F.A.C. pertains exclusively to the Florida Board of Professional Engineers and its functions with respect to the practice of engineering.

Florida Board of Professional Engineers (FBPE)

The FBPE is the primary government body that regulates the practice of engineering within the State of Florida. The Board has authority to adopt rules pursuant to the provisions of Chapter 120.536(1) and 120.54 to implement provisions of Chapter 471, F.S., or Chapter 455, F.S., conferring duties upon it. The FBPE has the authority to issue the final order including the imposition of disciplinary penalties.

The Board consists of 11 members: nine licensed engineers and two laypersons who are not and have never been engineers or members of any closely related profession or occupation. A member of the Board who is a licensed engineer must be selected and appointed based on his or her qualifications to provide expertise and experience to the Board at all times in civil engineering, structural engineering, electrical or electronic engineering, mechanical engineering, or engineering education.

All 11 members are appointed by the Governor for terms of 4 years each. When the terms of members serving as of July 1, 2014, expire, the terms of their immediate successors shall be staggered so that three members are appointed for 2 years, four members are appointed for 3 years, and four members are appointed for 4 years, as determined by the Governor. Each member shall hold office until the expiration of his or her appointed term or until a successor has been appointed.

Florida Engineers Management Corporation (FEMC)

The FEMC is a non-profit, single purpose corporation that operates through a contract with the Department of Business and Professional Regulation. The FEMC Board of Directors is composed of seven members. Five members are appointed by the Florida Board of Professional Engineers and must be Florida registrants. Two members are appointed by the Secretary of the Department of Business and Professional Regulation and must be laypersons not regulated by the Board.

Administrative, investigative and prosecutorial services are provided to the Florida Board of Professional Engineers by the Florida Engineers Management Corporation under Section 471.038, F.S.

Study Question 2:

Who is the FEMC and what are its functions?

Chapter 2

Rules Affected in the F.A.C. 61G15 in the Preceding Biennium

The following rules have been amended, adopted or repealed from the Florida Administrative Code, 61G15 in the preceding biennium, as underlined or crossed out below.

Chapter 61G15-18 – ORGANIZATION AND PURPOSE

61G15-18.011 – Definitions

“(7) The term “Florida Fire Prevention Code” shall mean the Florida Fire Prevention Code, 5th Edition, (2014), and which is incorporated herein by reference. The material incorporated is copyrighted material that is available for public inspection and examination, but may not be copied, at the Department of State, Administrative Code and Register Section, Room 701, The Capitol, Tallahassee, Florida 32399-0250, and at the Board office, 2639 North Monroe Street, Suite B-112, Tallahassee, FL 32303.”

Effective 02/22/2017:

Incorporated the Florida Fire Prevention Code into the Board’s rules by reference.

Chapter 61G15-20 – APPLICATION FOR LICENSURE, EDUCATION REQUIREMENTS, AND EXPERIENCE

61G15-20.0010 – Application for Licensure by Examination

“(1) Any person desiring to be licensed as a professional engineer shall submit a completed application to the Board. The instructions and application Form FBPE/001 (rev. 12/16), entitled, “Application for Principles and Practice Examination,” is hereby incorporated by reference, copies of which may be obtained from the Board office at 2639 North Monroe Street, Suite B-112, Tallahassee, Florida 32303; from the Board’s website at <http://www.fbpe.org/licensure/application-process/principles-practice-examination> or at <https://www.flrules.org/Gateway/reference.asp?No=Ref-08043>. The Board shall certify as eligible to take the licensure examination only those applicants who have completed the application form, remitted the application and examination fee required by Chapter 61G15-24, F.A.C., and who have demonstrated to the Board that they:

Effective 3/19/2017:

Updated the rule language and incorporated forms FBPE/001 and FBPE/003.

(a) Are graduates of a "Board approved engineering program" as defined by subsection 61G15-20.001(2), F.A.C., and

(b) Have four (4) years of acceptable engineering experience as defined by Rule 61G15-20.002, F.A.C.

(2) Any person desiring to take the fundamentals examination for the purpose of determining whether he or she is qualified to practice as an engineering intern in this state shall submit a completed application to the Board. The instructions and application Form FBPE/003 (rev. 12/16), entitled, "Application for Fundamentals of Engineering," is hereby incorporated by reference, and may be obtained from the Board office at 2639 North Monroe Street, Suite B-112, Tallahassee, Florida 32303; from the Board's website at <http://www.fbpe.org/licensure/application-process> or at <https://www.flrules.org/Gateway/reference.asp?No=Ref-08044>. The Board shall certify as eligible to take the Fundamentals Examination only those applicants who have completed the application form, remitted the application fee required by Chapter 61G15-24, F.A.C., and who have demonstrated to the Board that they are in the final year of, or have graduated from, "a Board approved engineering program" as defined by subsection 61G15-20.001(2), F.A.C."

61G15-20.0015 – Application for Licensure by Endorsement

"(1) Any person desiring to be licensed as a professional engineer by endorsement shall submit a completed application form to the Board. The instructions and application Form FBPE/002 (12/16), entitled "Application For Licensure By Endorsement", which is hereby incorporated herein by reference, copies of which may be obtained from the Board office at 2639 North Monroe Street, Suite B-112, Tallahassee, Florida 32303; the Board's website at <http://www.fbpe.org/licensure/application-process> or at <http://www.flrules.org/Gateway/reference.asp?No=Ref-08045>. The Board shall certify as eligible for licensure by endorsement applicants who have completed the application form, remitted the application fee for licensure by endorsement required by Chapter 61G15-24, F.A.C., and who have demonstrated to the Board that:

(a) The applicant meets the current criteria listed in Section 471.013, F.S., (the burden of proving the equivalency of any examination shall rest with the applicant), or

(b) The applicant holds a valid license to practice engineering issued by another state or territory of the United States, provided that the criteria for issuing the license was substantially the same as the licensure criteria which existed in Florida at the time the license was issued.

(2) If an applicant for licensure by endorsement satisfies the conditions found in Section 471.015(5)(a), F.S., then the Board shall deem that the applicant has passed an examination substantially equivalent to Part I, fundamentals, of the engineering examination. If an applicant for licensure by endorsement satisfies the conditions found in Section 471.015(5)(b), F.S., then the Board shall deem that the applicant has passed an examination substantially equivalent to Part I, fundamentals, and part II, principles and practice, of the engineering examination.

(3) An applicant for licensure by endorsement who has taken and failed either the fundamentals or the principles and practice examinations three (3) times or more before

Effective 3/19/2017:

Updated rule language, updated Forms FBPE/002 and Form FBPE/004, and incorporated Form FBPE/004 by reference.

passing, must document compliance with Rule 61G15-21.007, F.A.C., as a condition of eligibility for licensure by endorsement.

(4) The Board shall deem that an applicant for licensure by endorsement who has an engineering degree that is not EAC/ABET accredited has demonstrated substantial equivalency to an EAC/ABET accredited engineering program, as required by Rule 61G15-20.007, F.A.C., when such applicant has held a valid professional engineer's license in another state for 15 years and has had 20 years of professional-level engineering experience, to include the active practice of engineering for at least 3 of the last 5 years.

(5) An applicant for licensure by endorsement who previously held licensure in the State of Florida and whose license became null and void because of non-renewal must meet all current requirements for initial licensure. Such applicants, if otherwise eligible, shall be subject to disciplinary sanctions as a condition of licensure if it is demonstrated that they practiced engineering during any period their license was delinquent and/or null and void.

(6) Any person desiring to practice as an engineering intern in this state by endorsement shall submit a completed application to the Board. The instructions and application Form FBPE/004 (12/16), entitled, "Application for Engineer Intern by Endorsement," is hereby incorporated by reference and may be obtained from the Board office at 2639 North Monroe Street, Suite B-112, Tallahassee, Florida 32303; the Board's website at <http://www.fbpe.org/licensure/application-process> or at <https://www.flrules.org/Gateway/reference.asp?No=Ref-08046>. The Board shall certify as eligible for licensure by endorsement applicants who have completed the application form, remitted the application fee for licensure by endorsement required by Chapter 61G15-24, F.A.C., and who have demonstrated to the Board that they are in the final year of, or have graduated from, "a Board approved engineering program" as defined by subsection 61G15-20.001(2), F.A.C., and have passed the Fundamentals of Engineering Examination prior to application."

Chapter 61G15-24 – FEES

61G15-24.001 – Schedule of Fees

"(1) Pursuant to Section 471.011, F.S., the Board hereby establishes the following fees for applications, licensing and renewal, temporary registration, late renewal, licensure by endorsement, reactivation fee, and replacement of certificate.

(2) Engineering licensure fees (individuals and firms):

(a) Application fee for licensure by examination or endorsement – \$125.00 non-refundable.

(b) Initial license fee – \$100.00.

(c) Biennial renewal fee – \$93.75.

(d) Delinquency fee – \$93.75.

(e) Temporary license (individual) – \$25.00.

(f) Temporary Certificate of Authorization (firm) – \$50.00.

(g) Application fee for a Certificate of Authorization (firm) – \$125.00 non-refundable.

(h) Initial fee for Certificate of Authorization – \$100.00.

(i) Biennial Renewal fee for Certificate of Authorization (firm) – \$93.75.

(j) Inactive Status fee – \$125.00.

(k) Reactivation fee – \$150.00.

(l) Change of Status fee (Active/Inactive) – \$93.75.

Effective 3/19/2017:

Reduced licensure fees and established fees regarding continuing education courses.

- (m) Duplicate Certificate – \$25.00.
- (n) Special Inspector Certification fee – \$100.00.
- (o) Application fee for Special Inspector Certification – \$125.00.
- (p) Engineer Intern Endorsement fee – \$100.00.
- (3) Engineer Intern application fee – \$30.00.
- (4) Continuing Education provider fees:
Application fee for continuing education provider status – \$250.00.
- (5) Unlicensed Activity Fee collected by the Department of Business and Professional Regulation pursuant to Section 455.2281, F.S. – \$5.00.”

Study Question 3:

What is the fee collected by the DBPR for unlicensed activity?

Chapter 61G15-32 – RESPONSIBILITY RULES OF PROFESSIONAL ENGINEERS CONCERNING THE DESIGN OF FIRE PROTECTION SYSTEMS

61G15-32.002 – Definitions

“(1) Engineer of Record for the Fire Protection System(s): The Florida Registered Professional Engineer who develops the Fire Protection System(s) design criteria; performs analysis as required; and is responsible for the preparation of the Fire Protection System Engineering Documents. Except to the limited extent provided in subsection 61G15-32.002(10), F.A.C., the Engineer of Record for the Fire Protection system(s) is responsible for providing sealed, signed and dated Fire Protection System Engineering Documents that are in full conformity with the applicable design standards set forth in Rule Chapter 61G15-32, F.A.C.

Effective 3/28/2017:

Updated the Board’s rules regarding professional responsibilities of Engineers designing Fire Protection Systems.

(2) Fire Protection Component: Any individual part, subsystem or device to be incorporated in a Fire Protection System.

(3) Fire Protection System: Any assembly of Fire Protection components, materials, equipment, which require design to form a fully functional fire protection system.

(4) Listed: A fire protection component tested by a nationally recognized fire protection equipment testing organization. Recognized organizations include Underwriters Laboratories, Inc. and Factory Mutual Research Corporation.

(5) Fire Protection System Engineering Documents: The fire protection system engineering drawings, specifications, prescriptive and performance criteria, water supply analysis and other materials or representations, which are submitted with the general construction documents pursuant to Section 553.79(6), F.S., that set forth the overall design requirements and provide sufficient direction for the contractor to layout the construction, alteration, demolition, renovation, repair, modification, permitting and such, for any public or private fire protection system(s), which are prepared, signed, dated and sealed by the Engineer of Record for the Fire Protection System(s).

(6) Fire Protection System Layout Documents: Layout drawings, hydraulic calculations, catalog information on standard products, and other construction data prepared by the licensed contractor or Engineer of Record that provides detail on the location of risers, cross mains, branch lines, sprinkler heads, sizing of pipe, hanger locations, and hydraulic calculations and also serves as a guide for fabrication and installation of a fire protection system. Fire Protection System Layout Documents are based upon engineering direction

provided in the Fire Protection System Engineering Documents and require no additional engineering input. These documents do not require the seal of a Florida registered engineer.

(7) Codes and Standards: Those nationally recognized codes and standards adopted directly or by reference in Chapter 633, F.S., Fire Prevention and Control; the Florida Building Code; and the Florida Fire Prevention Code. The Florida Building Code and the Florida Fire Prevention Code are incorporated by reference in Rule 61G15-18.011, F.A.C. Applicable codes and standards also include those promulgated by State and local authorities having jurisdiction. In the event the codes and standards fail to cover or address a specific protection requirement, alternative research, test results, and engineering data may be utilized, relying on the Engineer of Record for Fire Protection to make an informed engineering decision. This definition is not intended to preclude the use of new technologies when said technology has been demonstrated to provide equivalent or improved protection above that of published National Fire Protection standards.

(8) Material Deviation: Any deviation from the design parameters established and documented by the Engineer of Record.

(9) Layout: The location of risers, cross mains, branch lines, sprinkler heads, sizing of pipe, hanger locations, and hydraulic calculations based on engineering documents.

(10) Fire Protection Delegated Engineering Documents. Fire Protection System Engineering Documents prepared by a delegated engineer to whom the Engineer of Record for the Fire Protection System has contractually delegated responsibility for the design to be simultaneously submitted for permit of a discrete and limited portion of a fire protection system and which are signed, sealed and dated by the delegated engineer. These documents shall be reviewed and approved by the Engineer of Record for the Fire Protection System for conformity with the Engineer of Record's design intent and shall be included in the engineering design documents prepared prior to submittal for a building permit and Fire Department installation permit, except when no building permit is required. When no building permit is required, the delegated engineering work bearing the seal of delegated engineer and approval of the Engineer of Record for the Fire Protection System shall be submitted together to the fire official for permitting."

61G15-32.008 – Design of Fire Alarms and Detection Systems

"(1) Fire alarms and detection systems include fire protection supervision, emergency alarm circuits, activation of life safety system controls and remote signaling of emergency conditions.

(2) The design specifications shall be based on the Florida Building Code, the Florida Fire Prevention Code, or as required by the local authority having jurisdiction. The Florida Building Code and the Florida Fire Prevention Code are incorporated by reference in Rule 61G15-18.011, F.A.C.

(3) For fire alarm plans on small systems below the threshold requirements for mandatory use of professional engineering services, the Engineer of Record shall specify the minimum system requirements.

(4) To ensure minimum design quality of Fire Alarm and Detection Systems Engineering Documents, said documents shall include as a minimum the following information when applicable:

(a) The documents shall be clear, with a symbols legend, system riser diagram showing all initiation and notification components, and cabling requirements. The documents shall indicate locations where fire ratings are required as determined by the system's survivability

Effective 3/28/2017:

Updated the Board's rules regarding professional responsibilities of Engineers designing Fire Protection Systems.

requirements, and shall identify the general occupancy of the protected property and each room and area unless it is clear from features shown.

(b) Locate initiation and notification devices and connections to related systems on the floor plans and sections when needed for clarity. Related systems include elevator controls smoke control systems, dampers, and doors.

(c) Strobe intensity and speaker output ratings for all notification devices.

(d) Identify the Class of circuits as listed in NFPA 72, which is contained within and incorporated into the Florida Fire Prevention Code.

(e) Identify the functions required by the alarm and control systems including the transmission of emergency signals being monitored or annunciated.

(f) Indicate whether the fire alarm is conventional or addressable, and indicate all zoning.

(g) Locate surge protective devices and required protective features.

(h) Locate system devices that are subject to environmental factors, and indicate requirements for the protection of equipment from temperature, humidity or corrosive atmospheres, including coastal salt air.

(i) The documents shall include a site plan of the immediate area around the protected building, structure or equipment when alarm devices are required outside the structure.

(j) In buildings where smoke detection will be obstructed by walls, beams or ceiling features, the Engineer of Record shall provide applicable design and details to direct the installer to mitigate the obstructions. In buildings with smoke detection under a pitched roof, the plans shall indicate the roof pitch and a building section shall be provided as part of the Engineering Design Documents.

(k) For fire detection systems utilizing smoke detection in situations where smoke stratification is anticipated, the design shall provide the necessary criteria to mitigate the detection problems.

(l) Systems designed using Performance Based criteria shall be identified and referenced to design guides or standards approved by the local authority having jurisdiction consistent with standards adopted by the Florida Fire Prevention Code and the Florida Building Code.

(m) The system design must indicate if the system is to provide a general evacuation signal or a zoned evacuation for all high-rise buildings or multi-tenanted properties as defined in section 2 of the Florida Building Code, Building.

(n) Wiring requirements for underground, wet locations, campus style wiring, protection against damage and burial depth shall be specified or indicated on the engineering design documents.

(o) Requirements for operations and maintenance procedures, manuals, system documentation, and instruction of Owner's operating personnel, as needed to operate the systems as intended over time.

(5) In the event that the Engineer of Record elects to specify specific equipment and to show the required wiring, battery and voltage drop (circuit analysis) calculations shall be completed. The calculations shall be completed using the equipment manufacturer's data and applicable NFPA 72 procedures.

(6) System test requirements shall be noted on the Engineering Design Documents.

(7) When the engineer determines that special requirements are required by the owner, insurance underwriter or local fire code amendments these requirements shall be documented or referenced on the Engineering Design Documents."

Study Question 4:

What should the design specifications for fire alarms and detection systems be based on?

61G15-32.009 – Design of Fine Water Spray (Mist) Fire Suppression and Control Systems

“(1) Fine water spray (mist) systems include water based fire suppression and control systems based on National Fire Protection Association (NFPA) Standard 750, which is contained within and incorporated into the Florida Fire Prevention Code.

(2) The fire protection system(s) shall be based on applicable NFPA standards when available or on alternative engineering sources including full scale fire testing and good engineering practice when no applicable standard exists.

(3) Design of fine water spray systems requires specific knowledge of hazards, physical containment and fire dynamics. A “pre-engineered” listed system shall be installed only after the engineer of record has evaluated the project specific protected hazard.”

Effective 3/28/2017:

Updated the Board’s rules regarding professional responsibilities of Engineers designing Water Spray (Mist) Fire Suppression and Control Systems.

61G15-35.003 – Qualification Program for Special Inspectors of Threshold Buildings

“(1) The minimum qualifying criteria for Special Inspectors of Threshold Buildings, also referred to as Threshold Inspectors, established by the Board shall be as follows:

(a) Proof of current licensure in good standing as a licensed professional engineer in the State of Florida whose principal practice is structural engineering or whose principal practice is in performing structural field inspections on Threshold Buildings.

(b) Licensed professional engineers whose principal practice is structural engineering shall also have three (3) years of experience in performing structural field inspections on threshold buildings and two (2) years of experience in the structural design of threshold buildings after having achieved licensure as a professional engineer. Such experience shall be within the seven (7) years preceding submission of the application. For the purpose of these criteria, structural design shall mean the design of all structural components of the building and shall not be limited to specific structural components only, such as foundations, prestressed or post-tensioned concrete, etc.

(c) Licensed professional engineers whose principal practice is structural field inspections shall have five (5) years of experience in performing structural field inspections on Threshold Buildings within the preceding seven (7) years prior to submission of the application and possess each of the certifications identified in paragraph 61G15-35.004(2)(f), F.A.C.

(2) Applications.

(a) The instructions and application form for Special Inspector, Form FBPE/TBI/006(10/15) is hereby incorporated by reference, “Application for Special Inspector

Effective 6/06/2016:

Updated the required certifications for Special Inspectors of Threshold Buildings by referencing the list in a different rule.

Certification." Copies of Form FBPE/TBI/006 may be obtained from the Board office or by downloading it from the internet website www.fbpe.org/licensure/application-process or at <https://www.flrules.org/Gateway/reference.asp?No=Ref-06472>.

(b) All applications for certification as a Special Inspector shall be submitted to the Board on Form FBPE/TBI/006.

(c) Applications shall contain the following basic information pertaining to the applicant:

1. Name;
2. Florida license number;
3. Experience dates and sufficient description of each to clearly demonstrate that the minimum qualification criteria has been met;
4. Letters of recommendation from three registered professional engineers whose principal practice is structural engineering in the State of Florida, one of whom must be certified as a Special Inspector;
5. The signature, date and seal by the applicant attesting to the competency of the applicant to perform structural inspections on threshold buildings; and
6. Completed form FBPE/TBI/006.

(d) Upon a determination that the application contains all of the information requested by these rules, review of the application shall be scheduled for consideration by the Board. Such applications may be approved, rejected or deferred for further information by the Board. If the Board defers an application for additional information, it shall notify the applicant of the information needed. Applicants shall be notified in writing of the Board's actions as soon as practicable and, in the case of rejected applications, the Board shall set forth the reasons for such rejection.

(3) Temporary Certification. Professional engineers who have been granted temporary licensure in Florida pursuant to the provisions of Section 471.021, F.S., shall also be granted temporary certification as a Special Inspector provided the criteria set forth in these rules have been met. Such temporary certification shall be limited to work on one specific project in this state for a period not to exceed one year.

(4) Roster of Special Inspectors. The Board shall maintain a roster of all persons certified as Special Inspectors pursuant to the criteria established in these rules and the law. The roster shall be made available to interested parties upon request. The roster shall be updated on a continuing basis and additions or deletions to the latest published roster may be verified by contacting the Board office."

Chapter 3

Changes to F.S. Chapters 455 and 471 in the Preceding Biennium

The following section of Chapter 455, F.S. was modified in the preceding biennium, as underlined below.

455.2281 – Unlicensed activities; fees; disposition

“In order to protect the public and to ensure a consumer-oriented department, it is the intent of the Legislature that vigorous enforcement of regulation for all professional activities is a state priority. All enforcement costs should be covered by professions regulated by the department. Therefore, the department shall impose, upon initial licensure and each subsequent renewal, a special fee of \$5 per licensee, in addition to all other fees imposed, to fund efforts to combat unlicensed activity. However, the department may not impose this special fee on a license renewal for any profession whose unlicensed activity account balance, at the beginning of the fiscal year before the renewal, totals more than twice the total of the expenditures for unlicensed activity enforcement efforts in the preceding 2 fiscal years. This waiver applies to all licensees within the profession, and assessment of the special fee may not begin or resume until the renewal cycle subject to the waiver has ended for all of the licensees in that profession. This waiver does not apply to a profession that has a deficit in its operating account or that is projected to have such a deficit in the next 5 fiscal years.”

Modified in 2016:

Waived the imposition of a special fee on unlicensed activity under a certain condition.

Study Question 5:

Under what condition the department may not impose the special fee on a license renewal?

Note: No sections of Chapter 471, F.S. was modified in the preceding biennium.

Chapter 4

Engineering Ethics and Principles of Professional Responsibility

Engineering Ethics

Engineering ethics is (1) the study of moral issues and decisions confronting individuals and organizations involved in engineering and (2) the study of related questions about moral conduct, character, ideals and relationships of peoples and organizations involved in technological development (Martin and Schinzinger, *Ethics in Engineering*).

Principles of Professional Responsibility

We, as Professional Engineers, are expected to take reasonable precautions and care in fulfilling our engineering duties, and uphold the honor and integrity of our profession. To understand further what this means, let's review the following principles of professional responsibility:

- *You must hold the utmost safety, health, and welfare of the public when practicing your profession.*
- *You must perform services only in the areas of your competence.*
- *You may issue public statements in an objective and truthful manner.*
- *You must represent each employer or client as a faithful trustee and avoid conflicts of interest.*
- *You must build your professional reputation on the merit of your services and must not compete with others unfairly.*
- *You must respect the proprietary information and intellectual property rights of other engineers.*

Now, to understand further what these principles mean, let's review the ethical standards associated with each principle individually.

How should you hold the utmost safety, health, and welfare of the public when practicing your profession?

If your professional judgment is overruled such that the safety, health and welfare of the public are compromised, you must inform your client, employer, or both of the possible outcomes or consequences.

If you believe that another person is in violation of engineering ethics, you must:

- present such information to the proper authority in writing, and
- cooperate with the proper authority in furnishing such information or assistance as required.

You must strive to advance the safety, health, and well-being of your community.

You must understand that the safety, health and welfare of the public are reliant on your sound engineering applications and judgments integrated into buildings, structures, machines, products, processes and devices.

You may approve or seal design documents only when they are:

- reviewed by you,
- designed safely, and
- in conformance with accepted engineering standards.

What does it mean to perform services only in the areas of your competence?

You must not affix your signature or seal to any plan or document if:

- it does not comply with applicable technical standards, or
- it was not prepared under your supervisory guidance and control.

You may conduct engineering work only when qualified by your academic background and professional experience in the specific field of engineering you are involved with.

You must always continue to advance your professional development in your engineering field by:

- engaging in professional practice,
- participating in continuing education programs,
- reading technical literature, and
- attending professional seminars.

You may accept an assignment requiring education and experience outside of your field of competence, provided that each technical segment of this assignment is reviewed, signed and sealed only by the qualified engineers who were in responsible charge of their respective segments.

Under what conditions you may issue public statements?

When serving as an expert or technical witness, you may express an engineering opinion only if it is founded on:

- your adequate knowledge of the facts,
- your technical competence in the subject matter, and
- your honest belief in the accuracy of your testimony.

You must not issue any statements, criticisms, or arguments on technical matters which are inspired or paid for by interested parties, unless you preface your comments by:

- identifying the interested parties on whose behalf the statements are made, and
- disclosing any financial interest you may have in such matters.

You must strive to extend the public knowledge and appreciation of engineering and its achievements, and must avoid the use of untrue or exaggerated statements pertaining to engineering.

You must be objective and truthful in all your professional reports, statements, or testimony, and must include all relevant information in such reports, statements, or testimony.

You must be honest in explaining your work and merit, and must not promote your own interests at the expense of the integrity, dignity and honor of the profession.

Study Question 6:

When serving as an expert or technical witness, under what conditions you may express an engineering opinion?

How should you represent each employer or client as a faithful trustee, and avoid conflicts of interest?

You must avoid all known conflicts of interest with your employer or client and immediately inform your employer or client of any business relationship, interest, or other situations that could influence your judgment or quality of your services.

You must not accept payment or other types of compensation from more than one party for services pertaining to the same project, unless the conditions are fully revealed to, and agreed to by, all interested parties.

You must not accept employment outside of your regular work before notifying your employer.

You must not propose or receive gifts or gratuities from outside parties who have a business affiliation with your employer or client associated with professional work for which you are in responsible charge.

If you are a member, advisor, or employee of a governmental body, you must not participate in decisions or actions that involve services you or your organization provide in any type of engineering practice.

Based on your research and evaluation, you must advise your employer or client of your belief that a project will be unsuccessful.

You must not use confidential information provided to you while executing your assignment as a means of personal gain, if such action contradicts the interests of your employer, your client, or the public.

You must not solicit or accept financial or other valuable considerations from material or equipment suppliers for specifying their product.

You must not solicit or accept an engineering contract from a governmental body or other entity on which a principal, officer, or employee of your organization serves as a member.

How do you build your professional reputation on the merit of your services and not compete with others unfairly?

You must not influence the award of a contract. You may bid and negotiate a contract for professional services impartially based on your proven competence and qualifications for the type of professional service being solicited.

You must not strive to gain employment or advance your professional career by falsely condemning other engineers, or by other improper means.

You must not falsify your educational background, or your professional experience or qualifications.

You must not offer or accept any gift, gratuity or unlawful valuable consideration to secure work, exclusive of securing salaried positions through employment agencies.

You must not request, propose, or accept a commission on a provisional basis if your professional judgment may be compromised.

Study Question 7:

Under what conditions you may bid/negotiate a contract for professional services?

You must not use another engineer's ideas or written materials without due credit and advance notification to such engineer. You must, whenever possible, name the person who may be responsible for his or her designs, inventions, writings, or other accomplishments.

You must not harm the professional reputation, prospects, practice or employment of another engineer.

You may prepare engineering articles to be published provided:

- they are within the context of your competency, and
- you do not claim credit for work performed by others.

Study Question 8:

Under what conditions you may prepare engineering articles for publication purposes?

How should you handle proprietary information and intellectual property rights of other engineers?

You must not promote or arrange for new employment or practice in connection with a specific project in which you have gained specialized knowledge without the consent of all interested parties.

You must not disclose confidential information concerning the business affairs or technical processes of any present or former employer or client without the approval of your employer or client.

If you are using designs supplied by your client, you must be aware that such designs remain the property of your client and may not be duplicated for others without your client's expressed permission.

Before undertaking work for others in which you may make improvements, plans, designs, inventions, or other records that may justify copyrights, patents, or proprietary rights, you must enter into a positive agreement regarding ownership.

You must be aware that your designs, data, records and notes referring exclusively to your employer's work are the property of your employer.

Chapter 5

Ethical and Disciplinary Case Studies

As explained in the previous chapter, we, as Professional Engineers, are expected to take reasonable precautions or care in the practice of our engineering profession as we must hold paramount the safety, health and welfare of the public. So, what happens when we fall short of our professional responsibilities, for which we were trusted by the public when we earned our honorable title of "Professional Engineer", thereby committing ethical violations?

The following ethical and disciplinary case studies were randomly selected and extracted from the Board's website, under "Disciplinary Actions". These case studies depict the different scenarios of ethical violations of the Florida Laws and Rules along with their resulting Final Orders issued by the Board.

FEMC Case No: 2013021397
FEMC Case No: 2012003988
FEMC Case No: 2011042037
FEMC Case No: 2012004836
FEMC Case No: 2013000391
FEMC Case No: 2014039414

For each individual case study, the applicability of the violations to the Florida Laws and Rules is stated.

FEMC CASE No:
2013021397

VIOLATION:
Section 471.033(1)(g), F.S.
Rule 61G15-19.001(4), F.A.C.

Case Review

Licensee was charged with violating Section 471.033(1)(g), Florida Statutes and Rule 61G15-19.001(4), Florida Administrative Code, negligence in the practice of engineering. Licensee signed and sealed engineering documents as a delegated engineer which were rejected numerous times by the Engineer of Record due to deficiencies. The deficiencies include, but are not limited to, failure to

include required calculations or design loads, the calculations did not include correct design loads and were missing the design of numerous members and also included mathematical errors.

Board Ruling

The case was presented to the full Board through an Informal Hearing. The Board imposed Costs of \$1,643, Probation for two years during which time Licensee shall complete a Board-approved course in Engineering Professionalism and Ethics, Project Review at 6 and 18 months, and the Board’s Study Guide. A Final Order was issued on February 18, 2015.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Section 471.033(1)(g), F.S., and Rule 61G15-19.001(4), F.A.C.

Study Question 9:

For FEMC Case No. 2013021397, what penalties were imposed on the Licensee by the Board?

* * * * *

FEMC CASE No:
2012003988

VIOLATION:
Section 125.69, F.S.
Section 471.033(1)(d), F.S.

Case Review

Licensee was charged with pleading guilty to four counts of violating Section 125.69, Florida Statutes and Section 2-11.1(e)(3)(a), Miami-Dade County Code of Ordinances, a crime proving a lack of moral character and thus has not maintained good moral character required of a Professional Engineer, a violation of Section 471.033(1)(d), Florida Statutes.

Board Ruling

This case was presented to the full Board for a Hearing. The Board imposed a Reprimand, an Administrative Fine of \$1,000, Costs of \$380.25, probation for two years, and completion of a Board-approved Course in Engineering Professionalism and Ethics and the Board’s Study Guide. A Final Order was issued on November 4, 2014.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Section 125.69, F.S., Section 2-11.1(e)(3)(a), Miami-Dade County Code of Ordinances, and Section 471.033(1)(d), F.S.

FEMC CASE No:

2011042037

VIOLATION:

Section 471.033(1)(a), F.S.

Case Review

Licensee was charged with failing to report any of the criminal dispositions made against him to the Board, a violation of Section 471.033(1)(a), Florida Statutes, by violating Section 455.227(1)(t), Florida Statutes. Licensee was found guilty of several criminal charges and failed to report any of those convictions to the Board as required.

Board Ruling

A Final Order was issued against the Licensee on June 25, 2013, adopting a Settlement Stipulation which indefinitely SUSPENDED the Licensee's professional engineer license until such time as the Licensee could demonstrate that he could practice with reasonable skill and safety. An Order on Reinstatement was issued on September 13, 2013. The Order Reinstated Licensee's professional engineering license with the following terms: two years' Probation with terms which include Project Review at three, six and 18 months, Licensee will be indirectly monitored by a supervising Professional Engineer who will submit quarterly reports by letter to the Board, Licensee shall enter into the Freedom Journey Program with Faith Farm Ministries who will also submit quarterly reports to the Board. A Final Order was issued on 6/25/13 – Order of Reinstatement was issued on 9/13/13.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Section 471.033(1)(a), F.S.

* * * * *

FEMC CASE No:

2012004836

VIOLATION:

Section 455.227(1)(c), F.S.

Section 471.033(1)(d), F.S.

Case Review

Licensee was charged with being guilty of a crime relating to the practice of engineering, a violation of Sections 455.227(1)(c) and 471.033(1)(d), Florida Statutes. Licensee entered a plea of guilty to felony charges of: Reward for Official Behavior/Unlawful (Fabricating Physical Evidence) Money Laundering/Unlawful Proceeds greater than 100K.

Board Ruling

The Board issued a Final Order imposing a \$5,000 Fine, Costs of \$243, Reprimand, SUSPENSION for three (3) years from the date of the Final Order, a Board-Approved Course in Professionalism and Ethics, and the Board's Study Guide. A Final Order was issued on 6/27/13.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Sections 455.227(1)(c) and 471.033(1)(d), F.S.

FEMC CASE No:
2013000391

VIOLATION:
Section 455.227(1)(c), F.S.
Section 471.033(1)(d), F.S.

Case Review

Licensee was charged with negligence in the practice of engineering, a violation of Section 455.227(1)(c), and Section 471.033(1)(d), Florida Statutes. Licensee entered a plea of guilty to criminal charges relating to fraud and civil theft from Licensee's employer.

Board Ruling

Pursuant to Settlement Stipulation, the Board imposed a Fine of \$1,000, Costs of \$159, a Reprimand, One Year Suspension, Two years' Probation which includes completion of the Study Guide, a Board Approved course in Advanced Engineering Professionalism and Ethics, and Appearance before the Board to discuss how the situation occurred, what improvements he plans to implement to improve his work product, and how he intends to prevent the circumstances from occurring in the future. A Final Order was issued on 4/15/14.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Sections 455.227(1)(c) and 471.033(1)(d), F.S.

Study Question 10:

For FEMC Case No. 2013000391, which violation was the Licensee charged with in the Board's Final Order?

* * * * *

FEMC CASE No:
2014039414

VIOLATION:
Section 471.033(1)(g), F.S.
Rule 61G15-19.001(4), F.A.C.

Case Review

Licensee was charged with violating Section 471.033(1)(g), F.S. and Rule 61G15-19.001(4), F.A.C.; negligence in the practice of engineering. Licensee, completed projects which contained deficiencies related to wind uplift loads being less than the actual design load, the roof member design not meeting the design criteria, etc.

Board Ruling

The case was presented to the full Board upon a Settlement Stipulation. The Board imposed a Cost of \$395.00, Appearance before the Board, a Reprimand, RESTRICTION from practicing until such time that she completes, passes and submits proof of passing the 16 hour NCEES Structural Exam. Upon proof of passing the exam, Licensee will be subject to project review at six (6) and eighteen (18) months, Probation for two (2) years with terms which include a Board-approved course in Intermediate Engineering Professionalism and Ethics. A Final Order was issued on June 23, 2015.

Applicability of the Violation to the Florida Laws and Rules

The Licensee was found in violation of Section 471.033(1)(g), F.S., and Rule 61G15-19.001(4), F.A.C.

Appendix A

Answers to Study Questions

Study Question 1:

List the regulations that govern the practice of engineering in the State of Florida:

The regulations governing the practice of engineering in the State of Florida are:

1. Florida Statutes, Chapter 455, Department of Business and Professional Regulation
2. Florida Statutes, Chapter 471, Engineering
3. Florida Administrative Code, 61G15, Florida Board of Professional Engineers

Study Question 2:

Who is the FEMC and what are its functions?

FEMC is a non-profit, single purpose corporation that operates through a contract with the Department of Business and Professional Regulation. FEMC provides the Florida Board of Professional Engineers with administrative, investigative and prosecutorial services.

Study Question 3:

What is the fee collected by the DBPR for unlicensed activity?

The Unlicensed Activity Fee collected by the Department of Business and Professional Regulation pursuant to Section 455.2281, F.S. is \$5.00.

Study Question 4:

What should the design specifications for fire alarms and detection systems be based on?

The design specifications for fire alarms and detection systems shall be based on the Florida Building Code, the Florida Fire Prevention Code, or as required by the local authority having jurisdiction.

Study Question 5:

Under what condition the department may not impose the special fee on a license renewal?

The department may not impose this special fee on a license renewal for any profession whose unlicensed activity account balance, at the beginning of the fiscal year before the renewal, totals more than twice the total of the expenditures for unlicensed activity enforcement efforts in the preceding 2 fiscal years.

Study Question 6:

When serving as an expert or technical witness, under what conditions you may express an engineering opinion?

In such a case, you may express an engineering opinion only if it is founded on:

1. Your adequate knowledge of the facts,
2. Your technical competence in the subject matter, and
3. Your honest belief in the accuracy of your testimony.

Study Question 7:

Under what conditions you should bid a contract for professional services?

You may bid and negotiate contracts for professional services impartially based on your proven competence and qualifications for the type of professional service being solicited.

Study Question 8:

Under what conditions you may prepare engineering articles to be published?

You may prepare engineering articles for publication purposes provided:

1. They are within the context of your competency, and
2. They do not credit you for work performed by others.

Study Question 9:

For FEMC Case No. 2013021397, what penalties were imposed on the Licensee by the Board?

The Board imposed the following penalties:

1. Costs of \$1,643,
2. Probation for two years during which time Licensee shall complete:
 - a. A Board-approved course in Engineering Professionalism and Ethics,
 - b. A Project Review at 6 and 18 months, and
 - c. The Board's Study Guide.

Study Question 10:

For FEMC Case No. 2013000391, which violation was the Licensee charged with in the Board's Final Order?

The Licensee was charged with negligence in the practice of engineering, a violation of:

1. Section 455.227(1)(c), F.S., and
2. Section 471.033(1)(d), F.S.

Appendix B

References

Florida Administrative Code: 61G15 – Board of Professional Engineers (Updated March 13, 2013)
<https://fbpe.org/documents/published/Legal/Statutes%20and%20Rules/61G15%20as%20of%2011.4.15%20for%20website.pdf>

The 2010 Florida Statutes: Chapter 455 - Business and Professional Regulation: General Provisions
http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0455/0455.html

The 2010 Florida Statutes: Chapter 471 - Engineering
http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0471/0471.html

Florida Administrative Weekly – Section XIV: List of Rules Affected
<https://www.flrules.org/notice/QuickSection14.asp?P0=All&P1=0>

Disciplinary Actions
<https://www.fbpe.org/index.php/legal/disciplinary-actions>

NSPE Code of Ethics
<http://www.nspe.org/resources/ethics/code-ethics>

ASCE Code of Ethics
<http://www.asce.org/code-of-ethics/>

ASME Code of Ethics
https://www.asme.org/getmedia/9EB36017-FA98-477E-8A73-77B04B36D410/P157_Ethics.aspx

Appendix C

Course Inquiry Form

For any questions or comments about this course, please complete this form and submit it:

To: **Gilbert Gedeon (Course Author)**
By Fax: **1-877-322-4774**
By Email: gilbert.gedeon@cedengineering.com
By Mail: **Continuing Education and Development, Inc.**
9 Greyridge Farm Court
Stony Point, NY 10970

From: _____

Phone No: _____

Fax No: _____

Email: _____

Date: _____

Subject: **Florida Laws and Rules for Professional Engineers (FL2-002)**

Inquiry: _____

CED will respond to your inquiry within 48 business hours.

If you wish to reach us phone for any urgent inquiry, please contact us at 1-877-322-5800.