

1 **PROFESSIONAL ENGINEERS LICENSING**

2 **AMENDMENTS**

3 2008 GENERAL SESSION

4 STATE OF UTAH

5 **Chief Sponsor: Fred J. Fife**

6 House Sponsor: Bradley A. Winn

7

8 **LONG TITLE**

9 **General Description:**

10 This bill modifies the Professional Engineers and Land Surveyors Licensing Act by
11 further distinguishing between the practice of professional engineering and the practice
12 of structural engineering.

13 **Highlighted Provisions:**

14 This bill:

- 15 ▶ modifies the definition of the practice of structural engineering;
- 16 ▶ restricts professional engineers from practicing in the areas defined for structural
17 engineers;
- 18 ▶ exempts applicants for licensure as a professional structural engineer from
19 examination requirements under certain circumstances, until January 1, 2009; and
- 20 ▶ provides an expert witness exemption for persons licensed outside the state of Utah.

21 **Monies Appropriated in this Bill:**

22 None

23 **Other Special Clauses:**

24 None

25 **Utah Code Sections Affected:**

26 AMENDS:

27 **58-22-102**, as last amended by Laws of Utah 1996, Chapter 259

28 **58-22-302**, as last amended by Laws of Utah 2003, Chapter 50

29 **58-22-305**, as repealed and reenacted by Laws of Utah 1996, Chapter 259

30 **58-22-501**, as repealed and reenacted by Laws of Utah 1996, Chapter 259



31
32 *Be it enacted by the Legislature of the state of Utah:*

33 Section 1. Section **58-22-102** is amended to read:

34 **58-22-102. Definitions.**

35 In addition to the definitions in Section 58-1-102, as used in this chapter:

36 (1) "Board" means the Professional Engineers and Professional Land Surveyors
37 Licensing Board created in Section 58-22-201.

38 (2) "Building" means a structure which has human occupancy or habitation as its
39 principal purpose, and includes the structural, mechanical, and electrical systems, utility
40 services, and other facilities required for the building, and is otherwise governed by the codes
41 adopted under Title 58, Chapter 56, Utah Uniform Building Standards Act.

42 (3) "Complete construction plans" means a final set of plans, specifications, and reports
43 for a building or structure that normally includes:

- 44 (a) floor plans;
- 45 (b) elevations;
- 46 (c) site plans;
- 47 (d) foundation, structural, and framing detail;
- 48 (e) electrical, mechanical, and plumbing design;
- 49 (f) information required by the energy code;
- 50 (g) specifications and related calculations as appropriate; and
- 51 (h) all other documents required to obtain a building permit.

52 (4) "EAC/ABET" means the Engineering Accreditation Commission/Accreditation
53 Board for Engineering and Technology.

54 (5) "Fund" means the Professional Engineer, Professional Structural Engineer, and
55 Professional Land Surveyor Education and Enforcement Fund created in Section 58-22-103.

56 (6) "NCEES" means the National Council of Examiners for Engineering and Surveying.

57 (7) "Principal" means a licensed professional engineer, professional structural engineer,

58 or professional land surveyor having responsible charge of an organization's professional
59 engineering, professional structural engineering, or professional land surveying practice.

60 (8) "Professional engineer" means a person licensed under this chapter as a professional
61 engineer.

62 (9) (a) "Professional engineering or the practice of engineering" means [~~any~~] a service
63 or creative work, the adequate performance of which requires engineering education, training,
64 and experience in the application of special knowledge of the mathematical, physical, and
65 engineering sciences to [~~such services~~] the service or creative work as consultation,
66 investigation, evaluation, planning, design, and design coordination of engineering works and
67 systems, planning the use of land and water, facility programming, performing engineering
68 surveys and studies, and the review of construction for the purpose of monitoring compliance
69 with drawings and specifications; any of which embraces [~~such~~] these services or work, either
70 public or private, in connection with any utilities, structures, buildings, machines, equipment,
71 processes, work systems, projects, and industrial or consumer products or equipment of a
72 mechanical, electrical, hydraulic, pneumatic, or thermal nature, and including [~~such~~] other
73 professional services as may be necessary to the planning, progress, and completion of any
74 engineering services[~~, provided that the~~].

75 (b) The practice of professional engineering [~~shall~~] does not include the practice of
76 architecture as defined in Section 58-3a-102, but a licensed professional engineer may perform
77 [~~such~~] architecture work as is incidental to the practice of engineering.

78 (10) "Professional engineering intern" means a person who:

79 (a) has completed the education requirements to become a professional engineer[~~;~~];

80 (b) has passed the fundamentals of engineering examination[~~;~~]; and

81 (c) is engaged in obtaining the four years of qualifying experience for licensure under
82 the direct supervision of a licensed professional engineer.

83 (11) "Professional land surveying or the practice of land surveying" means [~~any~~] a
84 service or work, the adequate performance of which requires the application of special
85 knowledge of the principles of mathematics, the related physical and applied sciences, and the

86 relevant requirements of law for adequate evidence to the act of measuring and locating lines,
87 angles, elevations, natural and man-made features in the air, on the surface of the earth, within
88 underground workings, and on the beds of bodies of water for the purpose of determining areas
89 and volumes, for the monumenting or locating property boundaries or points controlling
90 boundaries, and for the platting and layout of lands and subdivisions [~~thereof~~] of lands,
91 including the topography, alignment and grades of streets, and for the preparation and
92 perpetuation of maps, record plats, field notes records, and property descriptions that represent
93 these surveys and [~~such~~] other duties as sound surveying practices could direct.

94 (12) "Professional land surveyor" means an individual licensed under this chapter as a
95 professional land surveyor.

96 (13) "Professional structural engineer" means a person licensed under this chapter as a
97 professional structural engineer.

98 (14) "Professional structural engineering or the practice of structural engineering"
99 means [~~the design and analysis of complex buildings and structures and includes the definition of~~
100 ~~professional engineering or the practice of engineering provided in Subsection (9)] a service or
101 creative work in the following areas, and may be further defined by rule by the division in
102 collaboration with the board[-]:~~

103 (a) providing structural engineering services for significant structures including:

104 (i) buildings and other structures representing a substantial hazard to human life, which
105 include:

106 (A) buildings and other structures whose primary occupancy is public assembly with an
107 occupant load greater than 300;

108 (B) buildings and other structures with elementary school, secondary school, or day
109 care facilities with an occupant load greater than 250;

110 (C) buildings and other structures with an occupant load greater than 500 for colleges
111 or adult education facilities;

112 (D) health care facilities with an occupant load of 50 or more resident patients, but not
113 having surgery or emergency treatment facilities;

- 114 (E) jails and detention facilities with a gross area greater than 3,000 square feet; or
- 115 (F) an occupancy with an occupant load greater than 5,000;
- 116 (ii) buildings and other structures designated as essential facilities, including:
- 117 (A) hospitals and other health care facilities having surgery or emergency treatment
- 118 facilities with a gross area greater than 3,000 square feet;
- 119 (B) fire, rescue, and police stations and emergency vehicle garages with a mean height
- 120 greater than 24 feet or a gross area greater than 5,000 square feet;
- 121 (C) designated earthquake, hurricane, or other emergency shelters with a gross area
- 122 greater than 3,000 square feet;
- 123 (D) designated emergency preparedness, communication, and operation centers and
- 124 other buildings required for emergency response with a mean height more than 24 feet or a
- 125 gross area greater than 5,000 square feet;
- 126 (E) power-generating stations and other public utility facilities required as emergency
- 127 backup facilities with a gross area greater then 3,000 square feet;
- 128 (F) structures with a mean height more than 24 feet or a gross area greater than 5,000
- 129 square feet containing highly toxic materials as defined by the division by rule, where the
- 130 quantity of the material exceeds the maximum allowable quantities set by the division by rule;
- 131 and
- 132 (G) aviation control towers, air traffic control centers, and emergency aircraft hangars
- 133 at commercial service and cargo air services airports as defined by the Federal Aviation
- 134 Administration with a mean height greater than 35 feet or a gross area greater than 20,000
- 135 square feet; and
- 136 (iii) buildings and other structures requiring special consideration, including:
- 137 (A) structures or buildings that are:
- 138 (I) normally occupied by human beings; and
- 139 (II) five stories or more in height; or
- 140 (III) that have an average roof height more than 60 feet above the average ground level
- 141 measured at the perimeter of the structure; or

142 (B) all buildings over 200,000 aggregate gross square feet in area; and

143 (b) includes the definition of professional engineering or the practice of professional
144 engineering as provided in Subsection (9).

145 (15) "Structure" means that which is built or constructed, an edifice or building of any
146 kind, or [~~any~~] a piece of work artificially built up or composed of parts joined together in
147 [~~some~~] a

170 (e) have successfully completed a program of qualifying experience established by rule
171 by the division in collaboration with the board;

172 (f) have successfully passed examinations established by rule by the division in
173 collaboration with the board; and

174 (g) meet with the board or representative of the division upon request for the purpose
175 of evaluating the applicant's qualification for licensure.

176 (2) Each applicant for licensure as a professional structural engineer shall:

177 (a) submit an application in a form prescribed by the division;

178 (b) pay a fee determined by the department under Section 63-38-3.2;

179 (c) provide satisfactory evidence of good moral character;

180 (d) have graduated and received an earned bachelors or masters degree from an
181 engineering program meeting criteria established by rule by the division in collaboration with the
182 board;

183 (e) have successfully completed three years of licensed professional engineering
184 experience established by rule by the division in collaboration with the board, except that prior
185 to January 1, 2009, an applicant for licensure may submit a signed affidavit in a form prescribed
186 by the division stating that the applicant is currently engaged in the practice of structural
187 engineering;

188 (f) have successfully passed examinations established by rule by the division in
189 collaboration with the board~~;~~ and], except that prior to January 1, 2009, an applicant for
190 licensure may submit a signed affidavit in a form prescribed by the division stating that the
191 applicant is currently engaged in the practice of structural engineering; and

192 (g) meet with the board or representative of the division upon request for the purpose
193 of evaluating the applicant's qualification for licensure.

194 (3) Each applicant for licensure as a professional land surveyor shall:

195 (a) submit an application in a form prescribed by the division;

196 (b) pay a fee determined by the department under Section 63-38-3.2;

197 (c) provide satisfactory evidence of good moral character;

198 (d) (i) have graduated and received an associates, bachelors, or masters degree from a
199 land surveying program, or an equivalent land surveying program, such as a program offered by
200 the Utah College of Applied Technology as approved by the State Board of Regents,
201 established by rule by the division in collaboration with the board, and have successfully
202 completed a program of qualifying experience in land surveying established by rule by the
203 division in collaboration with the board; or

204 (ii) have successfully completed a program of qualifying experience in land surveying
205 prior to January 1, 2007, in accordance with rules established by the division in collaboration
206 with the board;

207 (e) have successfully passed examinations established by rule by the division in
208 collaboration with the board; and

209 (f) meet with the board or representative of the division upon request for the purpose of
210 evaluating the applicant's qualification for licensure.

211 (4) Each applicant for licensure by endorsement shall:

212 (a) submit an application in a form prescribed by the division;

213 (b) pay a fee determined by the department under Section 63-38-3.2;

214 (c) provide satisfactory evidence of good moral character;

215 (d) submit satisfactory evidence of:

216 (i) current licensure in good standing in a jurisdiction recognized by rule by the division
217 in collaboration with the board;

218 (ii) having successfully passed [~~any~~] an examination established by rule by the division
219 in collaboration with the board; and

220 (iii) full-time employment as a licensed professional engineer, professional structural
221 engineer, or professional land surveyor as a principal for at least five of the last seven years
222 immediately preceding the date of the application; and

223 (e) meet with the board or representative of the division upon request for the purpose
224 of evaluating the applicant's qualifications for license.

225 (5) The rules made to implement this section shall be in accordance with Title 63,

226 Chapter 46a, Utah Administrative Rulemaking Act.

227 Section 3. Section **58-22-305** is amended to read:

228 **58-22-305. Exemption from licensure.**

229 (1) In addition to the exemptions from licensure in Section 58-1-307, the following may
230 engage in the [~~stated limited~~] following acts or practices without being licensed under this
231 chapter:

232 (a) a person offering to render professional engineering, professional structural
233 engineering, or professional land surveying services in this state when not licensed under this
234 chapter if the person:

235 (i) holds a current and valid professional engineer, professional structural engineer, or
236 professional land surveyor license issued by a licensing authority recognized by rule by the
237 division in collaboration with the board;

238 (ii) discloses in writing to the potential client the fact that the professional engineer,
239 professional structural engineer, or professional land surveyor:

240 (A) is not licensed in the state;

241 (B) may not provide professional engineering, professional structural engineering, or
242 professional land surveying services in the state until licensed in the state; and

243 (C) that such condition may cause a delay in the ability of the professional engineer,
244 professional structural engineer, or professional land surveyor to provide licensed services in the
245 state;

246 (iii) notifies the division in writing of his intent to offer to render professional
247 engineering, professional structural engineering, or professional land surveying services in the
248 state; and

249 (iv) does not provide professional engineering, professional structural engineering, or
250 professional land surveying services, or engage in the practice of professional engineering,
251 professional structural engineering, or professional land surveying in this state until licensed to
252 do so;

253 (b) a person preparing a plan and specification for a one-[-]; or two-[-]; ~~three-, or~~

254 ~~four-]~~family residence not exceeding two stories in height[~~, exclusive of basement~~];

255 (c) a person licensed to practice architecture under Title 58, Chapter 3a, [~~Architecture~~]
256 Architects Licensing Act, performing architecture acts or incidental engineering or structural
257 engineering practices that do not exceed the scope of the education and training of the person
258 performing engineering or structural engineering;

259 (d) unlicensed employees, subordinates, associates, or drafters of a person licensed
260 under this chapter while preparing plans, maps, sketches, drawings, documents, specifications,
261 plats, and reports under the supervision of a professional engineer, professional structural
262 engineer, or professional land surveyor;

263 (e) a person preparing a plan or specification for, or supervising the alteration of or
264 repair to, an existing building affecting an area not exceeding 3,000 square feet when structural
265 elements of a building are not changed, such as foundations, beams, columns, and structural
266 slabs, joists, bearing walls, and trusses;

267 (f) an employee of a communications, utility, railroad, mining, petroleum, or
268 manufacturing company, or an affiliate of such a company, if the professional engineering or
269 professional structural engineering work is performed solely in connection with the products or
270 systems of the company and is not offered directly to the public; [~~and~~]

271 (g) an organization engaged in the practice of professional engineering, structural
272 engineering, or professional land surveying, provided that:

273 (i) the organization employs a principal; and

274 (ii) all individuals employed by the organization, who are engaged in the practice of
275 professional engineering, structural engineering, or land surveying, are licensed or exempt from
276 licensure under this chapter[~~;~~]; and

277 (h) a person licensed as a professional engineer, a professional structural engineer, or a
278 professional land surveyor in a state other than Utah serving as an expert witness, provided the
279 expert testimony meets one of the following:

280 (i) oral testimony as an expert witness in an administrative, civil, or criminal proceeding
281 is not part of the practice of the respective professions for which a license is required; or

282 (ii) written documentation included as part of the testimony in a preceding, including
283 designs, studies, plans, specifications, or similar documentation, is not part of the practice of the
284 respective professions for which a license is required provided that the purpose of the written
285 documentation is not to establish specifications, plans, designs, processes, or standards to be
286 used in the future in any industrial process, system, construction, designs, or repairs.

287 (2) Nothing in this section shall be construed to restrict a draftsman from preparing
288 plans for a client under the exemption provided in Subsection (1)(b) or taking those plans to a
289 professional engineer for his review, approval, and subsequent fixing of the engineer's seal to
290 that set of plans if they meet the building code standards.

291 Section 4. Section **58-22-501** is amended to read:

292 **58-22-501. Unlawful conduct.**

293 "Unlawful conduct" includes:

294 (1) using the title "professional engineer," "professional land surveyor," "land surveyor,"
295 "professional structural engineer," "structural engineer," or any other words, letters,
296 abbreviations, or designations which represent recognized professional engineering disciplines
297 indicating that the person using them is a professional engineer, professional land surveyor, or
298 professional structural engineer if the person has not been licensed under this chapter, except as
299 provided in Subsection 58-22-305(1); ~~or~~

300 (2) using the terms "engineering," "structural engineering," or "surveying" or any similar
301 words, letters, or abbreviations to describe the type of activity performed or offered to be
302 performed if the person has not been licensed under this chapter, except as provided in
303 Subsection 58-22-305(1);

304 (3) engaging in or representing itself as engaging in the practice of professional
305 engineering, professional structural engineering, or professional land surveying as a corporation,
306 proprietorship, partnership, or limited liability company [~~unless exempted from licensure under~~
307 ~~Section 58-1-307 or 58-22-305.~~], except as provided in Subsection 58-22-305(1);

308 (4) engaging in the practice of engineering, structural engineering, or surveying as set
309 forth in Subsections 58-22-102(9), (11), and (14), if the person has not been licensed under this

310 chapter, except as provided in Section 58-1-307 or Subsections 58-3a-304(1)(b) through (f); or
311 (5) a professional engineer engaging in the practice of structural engineering as defined
312 in Subsection 58-22-102(14)(a).