

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- 29 **58-22-305**, as repealed and reenacted by Laws of Utah 1996, Chapter 259
- 30 **58-22-501**, as repealed and reenacted by Laws of Utah 1996, Chapter 259



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
57 Surveying.

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

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

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

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

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

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

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

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

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

84 (11) "Professional land surveying or the practice of land surveying" means [~~any~~] a
85 service or work, the adequate performance of which requires the application of special
86 knowledge of the principles of mathematics, the related physical and applied sciences, and the
87 relevant requirements of law for adequate evidence to the act of measuring and locating lines,
88 angles, elevations, natural and man-made features in the air, on the surface of the earth, within
89 underground workings, and on the beds of bodies of water for the purpose of determining areas

90 and volumes, for the monumenting or locating property boundaries or points controlling
 91 boundaries, and for the platting and layout of lands and subdivisions [~~thereof~~] of lands,
 92 including the topography, alignment and grades of streets, and for the preparation and
 93 perpetuation of maps, record plats, field notes records, and property descriptions that represent
 94 these surveys and [~~such~~] other duties as sound surveying practices could direct.

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

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

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

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

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

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

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

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

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

115 (E) jails and detention facilities ~~with a gross area greater than 3,000 square feet~~ ; or

116 (F) an occupancy with an occupant load greater than 5,000;

117 (ii) buildings and other structures designated as essential facilities, including:

118 (A) hospitals and other health care facilities having surgery or emergency treatment
 119 facilities ~~with a gross area greater than 3,000 square feet~~ ;

120 (B) fire, rescue, and police stations and emergency vehicle garages ~~with a mean height~~
 120a 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**
 121a **greater than 3,000 square feet** ← ~~§~~ ;
- 122 (D) designated emergency preparedness, communication, and operation centers and
 123 other buildings required for emergency response ~~§~~ → **with a mean height more than 24 feet or a**
 123a **gross area greater than 5,000 square feet** ← ~~§~~ ;
- 124 (E) power-generating stations and other public utility facilities required as emergency
 125 backup facilities ~~§~~ → **with a gross area greater than 3,000 square feet** ← ~~§~~ ;
- 126 (F) structures ~~§~~ → **with a mean height more than 24 feet or a gross area greater than**
 126a **5,000 square feet** ← ~~§~~ containing highly toxic materials as defined by the division by rule,
 127 where the quantity of the material exceeds the maximum allowable quantities set by the
 128 division by rule; ~~§~~ → **and** ← ~~§~~ ;
- 129 (G) aviation control towers, air traffic control centers, and emergency aircraft hangars ~~§~~ → **at**
 129a **commercial service and cargo air services airports as defined by the Federal Aviation**
 129b **Administration with a mean height greater than 35 feet or a gross area greater than 20,000**
 129c **square feet** ← ~~§~~ ;
- 130 ~~§~~ → **[or**
 131 ~~——~~ **(H) buildings having critical national defense functions;]** ← ~~§~~ **and**
 132 (iii) buildings and other structures requiring special consideration, including:
 133 (A) structures or buildings that are:
 134 (I) normally occupied by human beings; and
 135 (II) five stories or more in height; or
 136 (III) that have an average roof height more than 60 feet above the average ground level
 137 measured at the perimeter of the structure; or
 138 (B) all buildings over ~~§~~ → **[60,000] 200,000** ← ~~§~~ aggregate gross square feet in area; and
 139 (b) ~~§~~ → **includes the definition of** ← ~~§~~ professional engineering or the practice of
 139a professional engineering as ~~§~~ → **[defined in**
 140 **this section] provided in Subsection (9)** ← ~~§~~ .
- 141 (15) "Structure" means that which is built or constructed, an edifice or building of any
 142 kind, or [any] a piece of work artificially built up or composed of parts joined together in
 143 [some] a definite manner, and as otherwise governed by the codes adopted under Title 58,
 144 Chapter 56, Utah Uniform Building Standards Act.
- 145 (16) "Supervision of an employee, subordinate, associate, or drafter of a licensee"
 146 means that a licensed professional engineer, professional structural engineer, or professional
 147 land surveyor is responsible for and personally reviews, corrects when necessary, and approves
 148 work performed by [any] an employee, subordinate, associate, or drafter under the direction of
 149 the licensee, and may be further defined by rule by the division in collaboration with the board.
- 150 (17) "TAC/ABET" means the Technology Accreditation Commission/Accreditation
 151 Board for Engineering and Technology.

152 (18) "Unlawful conduct" is defined in Sections 58-1-501 and 58-22-501.

153 (19) "Unprofessional conduct" as defined in Section 58-1-501 may be further defined
154 by rule by the division in collaboration with the board.

155 Section 2. Section **58-22-302** is amended to read:

156 **58-22-302. Qualifications for licensure.**

157 (1) Each applicant for licensure as a professional engineer shall:

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

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

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

161 (d) (i) have graduated and received a bachelors or masters degree from an engineering
162 program meeting criteria established by rule by the division in collaboration with the board; or

163 (ii) have completed the Transportation Engineering Technology and Fundamental
164 Engineering College Program prior to July 1, 1998, under the direction of the Utah Department
165 of Transportation and as certified by the Utah Department of Transportation;

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

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

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

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

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

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

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

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

179 (e) have successfully completed three years of licensed professional engineering
180 experience established by rule by the division in collaboration with the board ~~§~~ **→**, **except that**
180a **prior to January 1, 2009, an applicant for licensure may submit a signed affidavit in a form**
180b **prescribed by the division stating that the applicant is currently engaged in the practice of**
180c **structural engineering ←§** ;

181 (f) have successfully passed examinations established by rule by the division in
182 collaboration with the board~~[-and]~~, **except that prior to January 1, 2009, an applicant for**

183 licensure may submit a signed affidavit in a form prescribed by the division stating ~~§~~→ [:

184 ~~——(i)] ←§ that the applicant is currently engaged in the practice of structural engineering;~~

184a ~~§~~→ [~~and~~

185 ~~——(ii) the applicant is competent to engage in the practice of structural engineering as~~

186 ~~defined in Section 58-22-102;]~~ ←§ and

187 (g) meet with the board or representative of the division upon request for the purpose

188 of evaluating the applicant's qualification for licensure.

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

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

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

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

193 (d) (i) have graduated and received an associates, bachelors, or masters degree from a

194 land surveying program, or an equivalent land surveying program, such as a program offered by

195 the Utah College of Applied Technology as approved by the State Board of Regents,

196 established by rule by the division in collaboration with the board, and have successfully

197 completed a program of qualifying experience in land surveying established by rule by the

198 division in collaboration with the board; or

199 (ii) have successfully completed a program of qualifying experience in land surveying

200 prior to January 1, 2007, in accordance with rules established by the division in collaboration

201 with the board;

202 (e) have successfully passed examinations established by rule by the division in

203 collaboration with the board; and

204 (f) meet with the board or representative of the division upon request for the purpose of

205 evaluating the applicant's qualification for licensure.

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

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

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

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

210 (d) submit satisfactory evidence of:

211 (i) current licensure in good standing in a jurisdiction recognized by rule by the

212 division in collaboration with the board;

213 (ii) having successfully passed [~~any~~] an examination established by rule by the division

214 in collaboration with the board; and
215 (iii) full-time employment as a licensed professional engineer, professional structural
216 engineer, or professional land surveyor as a principal for at least five of the last seven years
217 immediately preceding the date of the application; and

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

220 (5) The rules made to implement this section shall be in accordance with Title 63,
221 Chapter 46a, Utah Administrative Rulemaking Act.

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

223 **58-22-305. Exemption from licensure.**

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

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

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

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

235 (A) is not licensed in the state;

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

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

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

244 (iv) does not provide professional engineering, professional structural engineering, or

245 professional land surveying services, or engage in the practice of professional engineering,
246 professional structural engineering, or professional land surveying in this state until licensed to
247 do so;

248 (b) a person preparing a plan and specification for a one-~~;~~ or two-~~;~~ ~~three-~~ ~~or~~
249 ~~four-~~ family residence not exceeding two stories in height~~[-exclusive of basement];~~

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

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

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

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

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

268 (i) the organization employs a principal; and

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

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

275 (i) oral testimony as an expert witness in an administrative, civil, or criminal

276 proceeding is not part of the practice of the respective professions for which a license is
 277 required; or

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

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

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

288 **58-22-501. Unlawful conduct.**

289 "Unlawful conduct" includes:

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

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

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

305 (4) engaging in the practice of engineering, structural engineering, or surveying as set
 306 forth in Subsections 58-22-102(9), (11), and (14), **§→ if the person has not been licensed under**
 306a **this chapter, ←§** except as provided in Section 58-1-307 or

307 Subsections 58-3a-304(1)(b) through (f); or
308 (5) a professional engineer engaging in the practice of structural engineering as defined
309 in Subsection 58-22-102(14)(a).

Legislative Review Note
as of 2-5-08 10:50 AM

Office of Legislative Research and General Counsel

S.B. 200 - Professional Engineers Licensing Amendments

Fiscal Note

2008 General Session
State of Utah

State Impact

Enactment of this bill will not require additional appropriations.

Individual, Business and/or Local Impact

Enactment of this bill likely will not result in direct, measurable costs and/or benefits for individuals, businesses, or local governments.
