

House Engrossed Senate Bill
engineering definitions

State of Arizona
Senate
Fifty-fifth Legislature
First Regular Session
2021

SENATE BILL 1062

AN ACT

AMENDING SECTION 32-101, ARIZONA REVISED STATUTES; RELATING TO THE BOARD
OF TECHNICAL REGISTRATION.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1 Be it enacted by the Legislature of the State of Arizona:

2 Section 1. Section 32-101, Arizona Revised Statutes, is amended to
3 read:

4 32-101. Purpose; definitions

5 A. The purpose of this chapter is to provide for the safety, health
6 and welfare of the public through the promulgation and enforcement of
7 standards of qualification for those individuals who are registered or
8 certified and seeking registration or certification pursuant to this
9 chapter.

10 B. In this chapter, unless the context otherwise requires:

11 1. "Advertising" includes business cards, signs or letterhead
12 provided by a person to the public.

13 2. "Alarm" or "alarm system":

14 (a) Means any mechanical or electrical device that is designed to
15 emit an audible alarm or transmit a signal or message if activated and
16 that is used to detect an unauthorized entry into a building or other
17 facility or alert other persons of the occurrence of a medical emergency
18 or the commission of an unlawful act against a person or in a building or
19 other facility.

20 (b) Includes:

21 (i) A silent, panic, holdup, robbery, duress, burglary, medical
22 alert or proprietor alarm that requires emergency personnel to respond.

23 (ii) A low-voltage electric fence.

24 (c) Does not include a telephone call diverter or a system that is
25 designed to report environmental and other occurrences and that is not
26 designed or used to alert or cause other persons to alert public safety
27 personnel.

28 3. "Alarm agent":

29 (a) Means a person, whether an employee, an independent contractor
30 or otherwise, who acts on behalf of an alarm business and who tests,
31 maintains, services, repairs, sells, rents, leases or installs alarm
32 systems.

33 (b) Does not include any action by a person that:

34 (i) Is performed in connection with an alarm system located on the
35 person's own property or the property of the person's employer.

36 (ii) Is acting on behalf of an alarm business whose work duties do
37 not include visiting the location where an alarm system installation
38 occurs.

39 4. "Alarm business":

40 (a) Means any person who, either alone or through a third party,
41 engages in the business of either of the following:

42 (i) Providing alarm monitoring services.

43 (ii) Selling, leasing, renting, maintaining, repairing or
44 installing a nonproprietor alarm system or service.

- 1 (b) Does not include any of the following:
2 (i) A person or company that purchases, rents or uses an alarm that
3 is affixed to a motor vehicle.
4 (ii) A person who owns or conducts a business of selling, leasing,
5 renting, installing, maintaining or monitoring an alarm that is affixed to
6 a motor vehicle.
7 (iii) A person who installs a nonmonitored proprietor alarm for a
8 business that the person owns, is employed by or manages.
9 (iv) The installation or monitoring of fire alarm systems.
10 (v) An alarm system that is operated by a city or town.
- 11 5. "Alarm subscriber" means any person who:
12 (a) Leases, rents or purchases any monitored alarm system or
13 service from an alarm business.
14 (b) Leases or rents an alarm system.
15 (c) Contracts with an alarm business for alarm monitoring,
16 installation, repair or maintenance services.
- 17 6. "Architect" means a person who, by reason of knowledge of the
18 mathematical and physical sciences and the principles of architecture and
19 architectural engineering acquired by professional education and practical
20 experience, is qualified to engage in the practice of architecture and is
21 registered as an architect pursuant to this chapter.
- 22 7. "Architectural practice" means any professional service or
23 creative work requiring architectural education, training and experience,
24 and the application of the mathematical and physical sciences and the
25 principles of architecture and architectural engineering to such
26 professional services or creative work as consultation, evaluation, design
27 and review of construction for conformance with contract documents and
28 design, in connection with any building, planning or site development. A
29 person ~~shall be~~ IS deemed to practice or offer to practice architecture
30 who in any manner represents that the person is an architect or is able to
31 perform any architectural service or other services recognized by
32 educational authorities as architecture.
- 33 8. "Board" means the state board of technical registration.
34 9. "Controlling person":
35 (a) Means a person who is designated by an alarm business.
36 (b) Does not include an alarm agent.
- 37 10. "Engineer" means a person who, ~~by reason of special knowledge~~
38 ~~of the mathematical and physical sciences and the principles and methods~~
39 ~~of engineering analysis and design acquired by professional education and~~
40 ~~practical experience, is qualified to practice engineering and is~~
41 ~~registered as a professional engineer pursuant to this chapter~~ BY REASON
42 OF ENGINEERING EDUCATION, TRAINING AND EXPERIENCE MAY APPLY ENGINEERING
43 PRINCIPLES AND INTERPRET ENGINEERING DATA.
- 44 11. "Engineering practice" means any professional service or
45 creative work requiring engineering education, training and experience ~~and~~

~~the application of special knowledge of the mathematical, physical and engineering sciences to such professional services or creative work as consultation, research investigation, evaluation, planning, surveying as defined in paragraph 22, subdivisions (d) and (e) of this subsection, design, location, development, and review of construction for conformance with contract documents and design, in connection with any public or private utility, structure, building, machine, equipment, process, work or project.~~ Such

IN APPLYING ENGINEERING PRINCIPLES AND INTERPRETING ENGINEERING DATA TO ENGINEERING ACTIVITIES THAT CLEARLY IMPACT THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC AND THE ENGINEERING DESIGN OF BUILDINGS, STRUCTURES, PRODUCTS, MACHINES, PROCESSES AND SYSTEMS TO THE EXTENT THAT THE ENGINEERING EDUCATION, TRAINING AND EXPERIENCE REQUIREMENTS PRESCRIBED BY SECTIONS 32-122 AND 32-122.01 ARE NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC. THE services ~~and~~ OR CREATIVE work MAY include ~~plans and~~ PROVIDING PLANNING SERVICES, STUDIES, designs, ~~relating to the location, development, mining and treatment of ore and other minerals~~ DESIGN COORDINATION, DRAWINGS, SPECIFICATIONS AND OTHER TECHNICAL SUBMISSIONS, SURVEYING AS PRESCRIBED IN PARAGRAPH 22, SUBDIVISIONS (d) AND (e) OF THIS SUBSECTION, AND REVIEWING CONSTRUCTION OR OTHER DESIGN PRODUCTS FOR THE PURPOSES OF MONITORING COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS RELATED TO ENGINEERED WORKS. A PERSON EMPLOYED ON A FULL-TIME BASIS AS AN ENGINEER BY AN EMPLOYER ENGAGED IN THE BUSINESS OF DEVELOPING, MINING AND TREATING ORES AND OTHER MINERALS SHALL NOT BE DEEMED TO BE PRACTICING ENGINEERING FOR THE PURPOSES OF THIS CHAPTER IF THE PERSON ENGAGES IN THE PRACTICE OF ENGINEERING EXCLUSIVELY FOR AND AS AN EMPLOYEE OF SUCH EMPLOYER AND DOES NOT REPRESENT THAT THE PERSON IS AVAILABLE AND IS NOT REPRESENTED AS BEING AVAILABLE TO PERFORM ANY ENGINEERING SERVICES FOR PERSONS OTHER THAN THE PERSON'S EMPLOYER. A person ~~shall be~~ IS deemed to ~~be practicing or offering to~~ practice engineering if the person DOES ANY OF THE FOLLOWING:

(a) Practices any ~~branch~~ DISCIPLINE of the profession of engineering, ~~or~~ HOLDS OUT TO THE PUBLIC THAT THE PERSON IS ABLE AND AUTHORIZED TO PRACTICE ANY DISCIPLINE OF ENGINEERING.

(b) REPRESENTS TO THE PUBLIC THAT THE PERSON IS A PROFESSIONAL ENGINEER by A verbal claim, sign, advertisement, letterhead, ~~OR~~ card or IN any other manner ~~represents that the person is a professional engineer or is able to perform or does perform any engineering service or other service recognized by educational authorities as engineering. A person employed on a full-time basis as an engineer by an employer engaged in the business of developing, mining and treating ores and other minerals shall not be deemed to be practicing engineering for the purposes of this chapter if the person engages in the practice of engineering exclusively for and as an employee of such employer and does not represent that the person is available and is not represented as being available to perform any engineering services for persons other than the person's employer.~~

1 (c) USES A TITLE THAT IMPLIES THAT THE PERSON IS A PROFESSIONAL
2 ENGINEER.

3 12. "Engineer-in-training" means a candidate for registration as a
4 professional engineer who BOTH:

5 (a) Is a graduate in an approved engineering curriculum of four
6 years or more of a school approved by the board or ~~who~~ has four years or
7 more of education or experience, or both, in engineering work that meets
8 standards specified by the board in its rules. ~~In addition, the candidate~~
9 ~~shall have~~

10 (b) HAS passed the engineer-in-training examination.

11 13. "Firm" means any individual or partnership, corporation or
12 other type of association, including the association of a nonregistrant
13 and a registrant who offers to the public professional services regulated
14 by the board.

15 14. "Geological practice" means any professional service or work
16 requiring geological education, training and experience, and the
17 application of special knowledge of the earth sciences to such
18 professional services as consultation, evaluation of mining properties,
19 petroleum properties and groundwater resources, professional supervision
20 of exploration for mineral natural resources including metallic and
21 nonmetallic ores, petroleum and groundwater, and the geological phases of
22 engineering investigations.

23 15. "Geologist" means a person, WHO IS not ~~of necessity an~~ REQUIRED
24 TO BE A PROFESSIONAL engineer, who by reason of special knowledge of the
25 earth sciences and the principles and methods of search for and appraisal
26 of mineral or other natural resources acquired by professional education
27 and practical experience is qualified to practice geology as attested by
28 registration as a professional geologist. A person WHO IS employed on a
29 full-time basis as a geologist by an employer engaged in the business of
30 developing, mining or treating ores and other minerals ~~shall~~ IS not ~~be~~
31 deemed to be engaged in geological practice for the purposes of this
32 chapter if the person engages in geological practice exclusively for and
33 as an employee of such employer and does not represent that the person is
34 available and is not represented as being available to perform any
35 geological services for persons other than the person's employer.

36 16. "Geologist-in-training" means a candidate for registration as a
37 professional geologist who BOTH:

38 (a) Is a graduate of a school approved by the board or ~~who~~ has four
39 years or more of education or experience, or both, in geological work that
40 meets standards specified by the board in its rules. ~~In addition, the~~
41 ~~candidate shall have~~

42 (b) HAS passed the geologist-in-training examination.

43 17. "Home inspection" means a visual analysis for the purposes of
44 providing a professional opinion of the building, any reasonably
45 accessible installed components and the operation of the building's

1 systems, including the controls normally operated by the owner, for the
2 following components of a residential building of four units or less:

- 3 (a) Heating system.
- 4 (b) Cooling system.
- 5 (c) Plumbing system.
- 6 (d) Electrical system.
- 7 (e) Structural components.
- 8 (f) Foundation.
- 9 (g) Roof covering.
- 10 (h) Exterior and interior components.
- 11 (i) Site aspects as they affect the building.
- 12 (j) Pursuant to rules adopted by the board, swimming pool and spa.

13 18. "Home inspection report" means a written report that is
14 prepared for compensation, that is issued after a home inspection and that
15 clearly describes and identifies the inspected systems, structures and
16 components of a completed dwelling and any visible major defects found to
17 be in need of immediate major repair and any recommendations for
18 additional evaluation by appropriate persons.

19 19. "Home inspector" means an individual who is certified pursuant
20 to this chapter as a home inspector and who engages in the business of
21 performing home inspections and writing home inspection reports.

22 20. "Landscape architect" means a person who, by reason of
23 professional education or practical experience, or both, is qualified to
24 engage in the practice of landscape architecture as attested by
25 registration as a landscape architect.

26 21. "Landscape architectural practice":

27 (a) Means ~~the performance of~~ PERFORMING professional services such
28 as consultations, investigation, reconnaissance, research, planning,
29 design or responsible supervision in connection with the development of
30 land and incidental water areas where, and to the extent that, the
31 dominant purpose of such services is the preservation, enhancement or
32 determination of proper land uses, natural land features, ground cover and
33 planting, naturalistic and aesthetic values, the settings of and
34 approaches to buildings, structures, facilities or other improvements,
35 natural drainage and the consideration and the determination of inherent
36 problems of the land relating to erosion, wear and tear, light or other
37 hazards. ~~This practice shall include the location~~

38 (b) INCLUDES LOCATING and ~~arrangement of~~ ARRANGING such tangible
39 objects and features as are incidental and necessary to the purposes
40 outlined in this paragraph. ~~but shall~~

41 (c) DOES not include ~~the making of~~ cadastral surveys or final land
42 plats for official recording or approval, nor mandatorily include planning
43 for governmental subdivisions.

1 22. "Land surveying practice" means ~~the performance of~~ PERFORMING
2 one or more of the following professional services:

3 (a) ~~Measurement of~~ MEASURING land to determine the position of any
4 monument or reference point that marks a property line, boundary or corner
5 for the purpose of determining the area or description of the land.

6 (b) ~~location, relocation, establishment, reestablishment~~ LOCATING,
7 RELOCATING, ESTABLISHING, REESTABLISHING, setting, resetting or replacing
8 of corner monuments or reference points ~~which~~ THAT identify land
9 boundaries, rights-of-way or easements.

10 (c) Platting or plotting of lands for the purpose of subdividing.

11 (d) ~~Measurement~~ MEASURING by angles, distances and elevations ~~of~~
12 natural or artificial features in the air, on the surface and immediate
13 subsurface of the earth, within underground workings and on the surface or
14 within bodies of water for the purpose of determining or establishing
15 their location, size, shape, topography, grades, contours or water surface
16 and depths, and the ~~preparation~~ PREPARING and ~~perpetuation of~~ PERPETUATING
17 field note records and maps depicting these features.

18 (e) Setting, resetting or replacing ~~of~~ points to guide the location
19 of new construction.

20 23. "Land surveyor" means a person who by reason of knowledge of
21 the mathematical and physical sciences, principles of land surveying and
22 evidence gathering acquired by professional education or practical
23 experience, or both, is qualified to practice land surveying as attested
24 by registration as a land surveyor. A person employed on a full-time
25 basis as a land surveyor by an employer engaged in the business of
26 developing, mining or treating ores or other minerals ~~shall~~ IS not ~~be~~
27 deemed to be engaged in land surveying practice for purposes of this
28 chapter if the person engages in land surveying practice exclusively for
29 and as an employee of such employer and does not represent that the person
30 is available and is not represented as being available to perform any land
31 surveying services for persons other than the person's employer.

32 24. "Land surveyor-in-training" means a candidate for registration
33 as a professional land surveyor who BOTH:

34 (a) Is a graduate of a school and curriculum approved by the board
35 or ~~who~~ has four years or more of education or experience, or both, in land
36 surveying work that meets standards specified by the board in its rules.
37 ~~In addition, the candidate shall have~~

38 (b) HAS passed the land surveyor-in-training examination.

39 25. "Low-voltage electric fence" means a fence that meets all of
40 the following requirements:

41 (a) Has an electric fence energizer that is powered by a commercial
42 storage battery with a rated voltage of not more than twelve volts and
43 that produces an electric charge on contact with the fence.

44 (b) Is completely enclosed by a nonelectric fence or wall.

45 (c) Is continuously monitored.

1 (d) Is attached to ancillary components or equipment such as closed
2 circuit television systems, access controls, battery recharging devices
3 and video cameras.

4 (e) Does not exceed ten feet in height or two feet higher than the
5 nonelectric fence or wall described in subdivision (b) of this paragraph,
6 whichever is higher.

7 (f) Has identification warning signs attached at intervals of not
8 more than sixty feet.

9 (g) Is not installed in an area zoned exclusively for single family
10 or multifamily residential use.

11 (h) Does not enclose property that is used for residential
12 purposes.

13 26. "Monitored alarm" means a device that is designed ~~for the~~
14 ~~detection of~~ TO DETECT an entry on any premises and that if activated
15 generates a notification signal.

16 27. "Person" means any individual, firm, partnership, corporation,
17 association or other organization.

18 28. "Principal" means an individual who is an officer of the
19 corporation or is designated by a firm as having full authority and
20 responsible charge of the services offered by the firm.

21 29. "PROFESSIONAL ENGINEER" MEANS A PERSON WHO, BY REASON OF
22 SPECIAL KNOWLEDGE OF THE MATHEMATICAL AND PHYSICAL SCIENCES AND THE
23 PRINCIPLES AND METHODS OF ENGINEERING ANALYSIS AND DESIGN ACQUIRED BY
24 PROFESSIONAL EDUCATION AND PRACTICAL EXPERIENCE, IS QUALIFIED TO PRACTICE
25 ENGINEERING AND IS REGISTERED AS A PROFESSIONAL ENGINEER PURSUANT TO THIS
26 CHAPTER.

27 ~~29.~~ 30. "Proprietor alarm" means any alarm or alarm system that is
28 owned by an alarm subscriber who has not contracted with an alarm
29 business.

30 ~~30.~~ 31. "Registrant" means a person WHO IS registered or certified
31 by the board.

32 ~~31.~~ 32. "Registration" means a registration or certification THAT
33 IS issued by the board.