

Senate Engrossed
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~~

1 ~~the application of special knowledge of the mathematical, physical and~~
2 ~~engineering sciences to such professional services or creative work as~~
3 ~~consultation, research investigation, evaluation, planning, surveying as~~
4 ~~defined in paragraph 22, subdivisions (d) and (e) of this subsection,~~
5 ~~design, location, development, and review of construction for conformance~~
6 ~~with contract documents and design, in connection with any public or~~
7 ~~private utility, structure, building, machine, equipment, process, work or~~
8 ~~project. Such~~ IN APPLYING ENGINEERING PRINCIPLES AND INTERPRETING
9 ENGINEERING DATA TO ENGINEERING ACTIVITIES THAT CLEARLY IMPACT THE HEALTH,
10 SAFETY AND WELFARE OF THE PUBLIC AND THE ENGINEERING DESIGN OF BUILDINGS,
11 STRUCTURES, PRODUCTS, MACHINES, PROCESSES AND SYSTEMS TO THE EXTENT THAT
12 THE ENGINEERING EDUCATION, TRAINING AND EXPERIENCE REQUIREMENTS PRESCRIBED
13 BY SECTIONS 32-122 AND 32-122.01 ARE NECESSARY TO PROTECT THE HEALTH,
14 SAFETY AND WELFARE OF THE PUBLIC. THE services ~~and~~ OR CREATIVE work MAY
15 include ~~plans and~~ PROVIDING PLANNING SERVICES, STUDIES, designs, ~~relating~~
16 ~~to the location, development, mining and treatment of ore and other~~
17 ~~minerals~~ DESIGN COORDINATION, DRAWINGS, SPECIFICATIONS AND OTHER TECHNICAL
18 SUBMISSIONS, SURVEYING AS PRESCRIBED IN PARAGRAPH 22, SUBDIVISIONS (d) AND
19 (e) OF THIS SUBSECTION, AND REVIEWING CONSTRUCTION OR OTHER DESIGN
20 PRODUCTS FOR THE PURPOSES OF MONITORING COMPLIANCE WITH DRAWINGS AND
21 SPECIFICATIONS RELATED TO ENGINEERED WORKS. A person ~~shall be~~ IS deemed
22 to ~~be practicing or offering to~~ practice engineering if the person DOES
23 ANY OF THE FOLLOWING:

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

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

39 (c) USES A TITLE THAT IMPLIES THAT THE PERSON IS A PROFESSIONAL
40 ENGINEER.

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

43 (a) Is a graduate in an approved engineering curriculum of four
44 years or more of a school approved by the board or ~~who~~ has four years or
45 more of education or experience, or both, in engineering work that meets

1 standards specified by the board in its rules. ~~In addition, the candidate~~
2 ~~shall have~~

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

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

8 14. "Geological practice" means any professional service or work
9 requiring geological education, training and experience, and the
10 application of special knowledge of the earth sciences to such
11 professional services as consultation, evaluation of mining properties,
12 petroleum properties and groundwater resources, professional supervision
13 of exploration for mineral natural resources including metallic and
14 nonmetallic ores, petroleum and groundwater, and the geological phases of
15 engineering investigations.

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

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

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

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

36 17. "Home inspection" means a visual analysis for the purposes of
37 providing a professional opinion of the building, any reasonably
38 accessible installed components and the operation of the building's
39 systems, including the controls normally operated by the owner, for the
40 following components of a residential building of four units or less:

- 41 (a) Heating system.
- 42 (b) Cooling system.
- 43 (c) Plumbing system.
- 44 (d) Electrical system.
- 45 (e) Structural components.

- 1 (f) Foundation.
- 2 (g) Roof covering.
- 3 (h) Exterior and interior components.
- 4 (i) Site aspects as they affect the building.
- 5 (j) Pursuant to rules adopted by the board, swimming pool and spa.
- 6 18. "Home inspection report" means a written report that is
- 7 prepared for compensation, that is issued after a home inspection and that
- 8 clearly describes and identifies the inspected systems, structures and
- 9 components of a completed dwelling and any visible major defects found to
- 10 be in need of immediate major repair and any recommendations for
- 11 additional evaluation by appropriate persons.
- 12 19. "Home inspector" means an individual who is certified pursuant
- 13 to this chapter as a home inspector and who engages in the business of
- 14 performing home inspections and writing home inspection reports.
- 15 20. "Landscape architect" means a person who, by reason of
- 16 professional education or practical experience, or both, is qualified to
- 17 engage in the practice of landscape architecture as attested by
- 18 registration as a landscape architect.
- 19 21. "Landscape architectural practice":
- 20 (a) Means ~~the performance of~~ PERFORMING professional services such
- 21 as consultations, investigation, reconnaissance, research, planning,
- 22 design or responsible supervision in connection with the development of
- 23 land and incidental water areas where, and to the extent that, the
- 24 dominant purpose of such services is the preservation, enhancement or
- 25 determination of proper land uses, natural land features, ground cover and
- 26 planting, naturalistic and aesthetic values, the settings of and
- 27 approaches to buildings, structures, facilities or other improvements,
- 28 natural drainage and the consideration and the determination of inherent
- 29 problems of the land relating to erosion, wear and tear, light or other
- 30 hazards. ~~This practice shall include the location~~
- 31 (b) INCLUDES LOCATING and ~~arrangement of~~ ARRANGING such tangible
- 32 objects and features as are incidental and necessary to the purposes
- 33 outlined in this paragraph. ~~but shall~~
- 34 (c) DOES not include ~~the~~ making ~~of~~ cadastral surveys or final land
- 35 plats for official recording or approval, nor mandatorily include planning
- 36 for governmental subdivisions.
- 37 22. "Land surveying practice" means ~~the performance of~~ PERFORMING
- 38 one or more of the following professional services:
- 39 (a) ~~Measurement of~~ MEASURING land to determine the position of any
- 40 monument or reference point that marks a property line, boundary or corner
- 41 for the purpose of determining the area or description of the land.
- 42 (b) ~~location, relocation, establishment, reestablishment~~ LOCATING,
- 43 RELOCATING, ESTABLISHING, REESTABLISHING, setting, resetting or replacing
- 44 of corner monuments or reference points ~~which~~ THAT identify land
- 45 boundaries, rights-of-way or easements.

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

2 (d) ~~Measurement~~ MEASURING by angles, distances and elevations ~~of~~
3 natural or artificial features in the air, on the surface and immediate
4 subsurface of the earth, within underground workings and on the surface or
5 within bodies of water for the purpose of determining or establishing
6 their location, size, shape, topography, grades, contours or water surface
7 and depths, and the ~~preparation~~ PREPARING and ~~perpetuation of~~ PERPETUATING
8 field note records and maps depicting these features.

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

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

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

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

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

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

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

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

36 (c) Is continuously monitored.

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

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

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

- 1 (g) Is not installed in an area zoned exclusively for single family
2 or multifamily residential use.
- 3 (h) Does not enclose property that is used for residential
4 purposes.
- 5 26. "Monitored alarm" means a device that is designed ~~for the~~
6 ~~detection of~~ TO DETECT an entry on any premises and that if activated
7 generates a notification signal.
- 8 27. "Person" means any individual, firm, partnership, corporation,
9 association or other organization.
- 10 28. "Principal" means an individual who is an officer of the
11 corporation or is designated by a firm as having full authority and
12 responsible charge of the services offered by the firm.
- 13 29. "PROFESSIONAL ENGINEER" MEANS A PERSON WHO, BY REASON OF
14 SPECIAL KNOWLEDGE OF THE MATHEMATICAL AND PHYSICAL SCIENCES AND THE
15 PRINCIPLES AND METHODS OF ENGINEERING ANALYSIS AND DESIGN ACQUIRED BY
16 PROFESSIONAL EDUCATION AND PRACTICAL EXPERIENCE, IS QUALIFIED TO PRACTICE
17 ENGINEERING AND IS REGISTERED AS A PROFESSIONAL ENGINEER PURSUANT TO THIS
18 CHAPTER.
- 19 ~~29.~~ 30. "Proprietor alarm" means any alarm or alarm system that is
20 owned by an alarm subscriber who has not contracted with an alarm
21 business.
- 22 ~~30.~~ 31. "Registrant" means a person WHO IS registered or certified
23 by the board.
- 24 ~~31.~~ 32. "Registration" means a registration or certification THAT
25 IS issued by the board.