

LOCAL OFFICIALS' GUIDE TO ARCHITECTURE, ENGINEERING & LAND SURVEYING

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FOREWORD

This guide has been prepared and published by the Colorado State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors (the “Board”). Its purpose is to aid local governments and building officials to ensure compliance with the laws and regulations governing the professions of architecture, engineering, and land surveying in Colorado. The intent is to provide answers to questions about architects, engineers, and land surveyors – what they can or cannot do and what constitutes unlicensed practice. It encompasses general information regarding the Board’s statutes, rules, and policies. This guide is not intended to be a substitute for the specific provisions of state statutes, Board rules, and policies. Refer to them for further clarification. They may be found online at www.dora.state.co.us/aes.

This information is provided as part of the continuing effort of the Board to protect the life, health, safety, property, and welfare of the people of Colorado through proper enforcement of the legal requirements for architecture, engineering, and land surveying in the state.

It is clear public policy in this state that the offering and performance of architectural, engineering and land surveying services must be done by Colorado licensed professionals. However, there are limited exceptions allowing unlicensed persons to provide these services, as found in sections 12-25-103, 203, and 303, et seq. of the Colorado Revised Statutes.

INTRODUCTION

Building code regulations and professional licensing laws are meant to work together. Local officials and state licensing boards each exist to protect the public against unsafe structures, incompetent practitioners, and unlicensed individuals. Though our charge to protect the public’s health, safety, property, and welfare is the same, the approach is different.

The Board strives to assure the public that only those who meet minimum standards may plan, design and administer the construction of nonexempt structures and determine property boundaries.

Local jurisdictions promulgate, adopt, and enforce planning, land use, and building codes. These regulations are intended to protect the health, safety, property, and welfare of the general public. If local officials require all architectural, engineering, and land surveying documents for non-exempt buildings and structures to bear the appropriate signature and seal of a licensed architect, engineer, or land surveyor, as appropriate, then our licensure system will share the responsibility for protecting the health, safety, property, and welfare of the public.

We rely on you, the local official, to assist in this system of checks and balances. You, in turn, rely on the Board as a source of information and support.

What resources can the Board provide to me?

We hope to help you by answering many of your questions, either here, on the Board's website, through e-mail, or on the telephone.

Website: www.dora.state.co.us/aes

Email: aes@dora.state.co.us

Telephone: 303.894.7775 - Board's Administrative Assistant
303.894.7792 - Board's Enforcement Supervisor
303.894.7781 - Board's Program Director

Where can I get a copy of the laws, rules, and policies dealing with architects, engineers, and land surveyors?

www.dora.state.co.us/aes/lawsrulespolicies

How can local officials help the Board?

In order to do our job, we need the support and assistance of local government officials, city and county engineers and surveyors, building officials, planning officials, fire marshals, etc. The following paragraphs outline a number of ways in which you can help the Board.

How to file a complaint

Consumers are much more likely to discuss issues with a local official than Board staff. As a local official, you work directly with the people who hire architects, engineers, and land surveyors. You can let consumers know that if they have a complaint, they can find information and file it with the Board at www.dora.state.co.us/reg_investigations/file_complaint.

How to provide information about substandard practice

If you see substandard practice, you can file a complaint at the above link. In lieu of filing a complaint, you are welcome to bring your concerns to the attention of the Board by providing the

facts of the situation, including supporting evidence, by sending the information to the Board's email address at aes@dora.state.co.us.

How to verify if a license is active

You can also assist the Board by ensuring that those who are practicing in your jurisdiction are actively licensed professionals. You may find out if a license is active, when it was first issued, last renewed, what the license number is, and whether there are any restrictions on the license by checking ALISON – the Division of Registration's [Automated Licensure System Online](http://www.doradls.state.co.us/alison). Locate ALISON at www.doradls.state.co.us/alison.

By the way, active licensure for landscape architects, electricians, electrical contractors, plumbers, and plumbing contractors can be verified at the same website.

How to review a Board action against a license

If you would like to view a Board action you may use the [Registrations Online Documents \(ROD\)](http://www.dora.state.co.us/registrations/ROD). ROD is a website that makes certain scanned documents related to Board actions taken on licenses available to the public via the Internet. A document may be found on ROD if a license has been disciplined or if the Board has taken some other non-disciplinary action against a license that restricts or limits an individual's license. Stipulations, Final Agency Orders, Suspensions, Revocations, and Cease and Desist Orders, among other actions can be found at www.dora.state.co.us/registrations/ROD.

DEFINITIONS

Architecture

As used in this guide, **Architecture Practice Act** means Part 3 of Article 25 of Title 12, C.R.S.

Architect means a person licensed under the provisions of the Architecture Practice Act and entitled thereby to conduct the practice of architecture in the state of Colorado.

§ 12-25-302(1), C.R.S.

The **Practice of Architecture** means the performance of the professional services of planning and design of buildings, preparation of construction contract documents including working drawings and specifications for the construction of buildings, and the observation of construction pursuant to an agreement between an architect and any other person, but does not include the performance of the construction of buildings.

§ 12-25-302(6)(a), C.R.S.

Engineering

As used in this guide, **Engineering Practice Act** means Part 1 of Article 25 of Title 12, C.R.S.

Engineer means a person who, by reason of intensive preparation in the use of mathematics, chemistry, physics, and engineering sciences, including the principles and methods of engineering analysis and design, is qualified to perform engineering work.

§ 12-25-102(3), C.R.S.

The **Practice of Engineering** means the performance for others of any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical and engineering sciences to such professional services or creative work, including consultation, investigation, evaluation, planning, design, and the observation of construction to evaluate compliance with plans and specifications in connection with the utilization of the forces, energies, and materials of nature in the development, production, and functioning of engineering processes, apparatus, machines, equipment, facilities, structures, buildings, works, or utilities, or any combination or aggregations thereof, employed in or devoted to public or private enterprise or uses.

An individual shall be construed as practicing or offering to practice "professional engineering" if the individual by verbal claim, sign, advertisement, letterhead, card, or in any other way, represents himself or herself to be a professional engineer; or through the use of any other means implies that the individual is licensed; or performs engineering services.

§ 12-25-102(10), C.R.S.

Land Surveying

As used in this guide, **Land Surveying Practice Act** means Part 2 of Article 25 of Title 12, C.R.S.

Professional Land Surveyor means an individual who practices professional land surveying and who is currently licensed with the board after demonstrating competency to practice.

§ 12-25-202(7), C.R.S.

The **Practice of Land Surveying** means the application of special knowledge of principles of mathematics, methods of measurement, and law for the determination and preservation of land boundaries and specifically includes: restoration and rehabilitation of corners and boundaries in the United States public land survey system; obtaining and evaluating boundary evidence; determination of the areas and elevations of land parcels; subdivision of land parcels into smaller parcels and layout of alignment and grades for streets or roads to serve such smaller parcels; measuring and platting underground mine workings; preparation of the boundary control

portions of geographic information systems and land information systems except as allowed otherwise; establishment, restoration, and rehabilitation of land survey monuments and bench marks; preparation of land survey plats, condominium plats, monument records, property descriptions that result from the practice of professional land surveying, and survey reports; surveying, monumenting, and platting of easements and rights-of-way; geodetic surveying; basic control for engineering projects; and any other activities incidental to and necessary for the adequate performance of the other services described in this paragraph.

An individual shall be construed as practicing or offering to practice "professional land surveying" if the individual, by verbal claim, sign, letterhead, or card or in any other way holds himself or herself out to be a professional land surveyor, or as being able to perform any professional land surveying service, or if such individual does perform any professional land surveying service or work.

§ 12-25-202(6), C.R.S.

TITLES

Architect

The title **Architect**, as it pertains to the building profession and industry, may only be used by those who are actively licensed to practice architecture in the state of Colorado.

§§ 12-25-302(1) and 305(1), C.R.S.

There is no difference between “registered” and “licensed” architect in Colorado. Colorado law currently refers to licensed architects. Previously, it referred to registered architects and this terminology remains in wide use.

Engineer

Only those who are actively licensed in Colorado may call themselves **Professional Engineers**. Only those who are actively licensed or under an exemption may call themselves **civil engineer, structural engineer, chemical engineer, petroleum engineer, mining engineer, mechanical engineer, or electrical engineer**.

§§ 12-25-102(11), 105(1) and 105(3), C.R.S.

All licensed engineers may use the titles or abbreviations of the titles, “Professional Engineer”, “Consulting Engineer”, “Licensed Engineer” and “Registered Engineer.”

There is no difference between “registered” and “licensed” engineer in Colorado. Colorado law currently refers to licensed engineers. Previously, it referred to registered engineers and this terminology remains in wide use.

Land Surveyor

Only those who are actively licensed in Colorado may call themselves a **land surveyor** or a **Professional Land Surveyor**.

§§ 12-25-202(7) and 205(1), C.R.S.

There is no difference between “registered” and “licensed” land surveyor in Colorado. Colorado law currently refers to licensed land surveyors. Previously, it referred to registered land surveyors and this terminology remains in wide use.

OFFERING PROFESSIONAL SERVICES – INDIVIDUALS AND COMPANIES

Architecture

In order to offer to practice or practice architectural services in Colorado, an individual must be actively licensed. Individuals who are licensed to practice in another state may solicit work in Colorado, but may not practice on any stage of work in Colorado prior to becoming licensed.

§§ 12-25-302(1), 305(1), and 303(7), C.R.S.

Unlicensed individuals may not otherwise offer to practice architecture.

For a company to offer architectural services, its architectural practice must be under the direct supervision of an actively licensed Colorado architect who is an officer of the corporation, a member of the limited liability company, or a partner in the registered limited liability partnership.

§ 12-25-304(3), C.R.S.

If a company has the word “architects” in its name, a majority of the individual officers and directors or members or partners must be either licensed in Colorado or qualify for licensure by endorsement.

§ 12-25-304(1), C.R.S.

Engineering

Individuals offering to practice or practice engineering services in Colorado must be actively licensed. This does not limit the generic use of the term “engineer” and its derivatives. But the use of the terms “engineer”, “engineered”, and “engineering” in association with the defined practice of engineering requires a Colorado license.

§§ 12-25-102(11), 105(1) and 105(3), C.R.S.

An engineering company that is a partnership must have at least one partner who is an actively licensed Colorado Professional Engineer in responsible charge and directly responsible for work when issued.

§ 12-25-104(1)(b), C.R.S.

In the case of companies that offer engineering services that are joint stock associations, limited liability companies or corporations, engineering services must be under the responsible charge of an actively licensed Colorado Professional Engineer who is directly responsible for the engineering work.

§ 12-25-104(1)(c), C.R.S.

Land Surveying

Individuals offering to practice or practicing land surveying in Colorado must be actively licensed.

§§ 12-25-202(7) and 205(1), C.R.S.

Land surveying companies that offer to practice or practice land surveying shall have an actively licensed Colorado Professional Land Surveyor who is directly responsible for the land surveying work.

§ 12-25-204(2), C.R.S.

EXEMPTIONS

Architecture

The Architecture Practice Act provides instances where unlicensed individuals may plan, design and supervise the construction, alteration, remodeling, additions to, or repair of any of the following:

- (a) One, two, three, and four unit family dwellings, including accessory buildings commonly associated with such dwellings;
- (b) Garages, industrial buildings, offices, farm buildings, and buildings for the marketing, storage, or processing of farm products, and warehouses, that do not exceed one story in height, exclusive of a one-story basement, and under applicable building codes, are not designed for occupancy by more than ten persons;
- (c) Additions, alterations, or repairs to the foregoing buildings that do not cause the completed buildings to exceed the applicable limitations set forth in the above paragraphs;
- (d) Nonstructural alterations of any nature to any building if such alterations do not affect the life safety of the occupants of the building.

§ 12-25-303(1), C.R.S.

The following exemptions to the Architecture Practice Act also apply:

- (2) Nothing shall prevent, prohibit, or limit any municipality or county of this state, home rule or otherwise, from adopting such building codes as may, in the reasonable exercise of the police power of said governmental unit, be necessary for the protection of the inhabitants of said municipality or county.
- (3) Nothing shall be construed as curtailing or extending the rights of any other profession or craft.
- (4) Nothing shall be construed as prohibiting the practice of architecture by any employee of the United States government or any bureau, division, or agency thereof while in the discharge of his or her official duties.
- (5) Nothing shall be construed to prevent the independent employment of a licensed professional engineer practicing pursuant to the Act.

§§ 12-25-303(2) through (5), C.R.S.

Additionally, there is an exemption for **Interior Designers**:

- ▶ Interior designers may prepare interior design documents and specifications for interior finishes and nonstructural elements within and surrounding interior spaces of a building or structure of any size, height, and occupancy and may file such documents and specifications for the purpose of obtaining approval for a building permit as provided by law from the appropriate town, city, city and county, or regional building authority, which may approve or reject any such filing in the same manner as for other professions.
- ▶ Interior designers shall not be engaged in the construction of the structural frame system supporting a building; mechanical, plumbing, heating, air conditioning, ventilation, or electrical vertical transportation systems; fire-rated vertical shafts in any multi-story structure; fire-related protection of structural elements; smoke evacuation and compartmentalization; emergency

sprinkler systems; emergency alarm systems; or any other alteration affecting the life safety of the occupants of a building.

► Any interior designer shall, as a condition of filing interior design documents and specifications for the purpose of obtaining approval for a building permit, provide to the responsible building official of the jurisdiction a current copy of the interior designer's professional liability insurance coverage that is in force.

► Interior designers are not subject to the restrictions in section 12-25-303(1)(b) and (d), C.R.S., as noted above.

§ 12-25-303(6)(a) and(b), C.R.S.

Interior designer is defined in the statute as a person who engages in:

- Consultation, study, design analysis, drawing, space planning, and specification for nonstructural or nonseismic interior construction with due concern for the life safety of the occupants of the building;
- Preparing and filing interior design documents for the purpose of obtaining approval for a building permit as provided by law for nonstructural or nonseismic interior construction, materials, finishes, space planning, furnishings, fixtures, equipment, lighting, and reflected ceiling plans;
- Designing for fabrication nonstructural elements within and surrounding interior spaces of buildings; or
- The administration of design construction and contract documents, as the clients' agent, relating to the functions described in sub-subparagraphs (A) to (C) of this subparagraph (I), and collaboration with specialty consultants and licensed practitioners in other areas of technical expertise.

§ 12-25-303(6)(c)(I), C.R.S.

Under this exemption, Interior Designers are expected to have:

- Graduated with a degree in interior design from a college or university offering such program consisting of four or more years of study and has completed two years of interior design experience; or graduated with a degree in interior design from a college or university offering such program consisting of two or more years of study and has completed four years of interior design experience; and
- Met the education and experience requirements of, and has subsequently passed, the qualification examination promulgated by the national council for interior design qualification or its successor organization.

§ 12-25-303(6)(c)(II), C.R.S.

"Nonstructural or nonseismic" includes interior elements or components that are not load-bearing or that do not assist in the seismic design and do not require design computations for a building's structure. Common nonstructural or nonseismic elements or components include, but are not

limited to, ceiling and partition systems that employ normal and typical bracing conventions and are not part of the structural integrity of the building.

§ 12-25-303(6)(d), C.R.S.

Engineering

The Engineering Practice Act provides situations where unlicensed individuals may provide engineering in the performance of the following activities:

- (a) Individuals who normally operate and maintain machinery or equipment;
- (b) Individuals who perform engineering services for themselves;
- (c) Partnerships, professional associations, joint stock companies, limited liability companies, or corporations, or the employees of any such organizations, who perform engineering services for themselves or their affiliates;
- (d) Individuals who perform engineering services under the responsible charge of a professional engineer;
- (e) Work of a strictly agricultural nature which is not required to be of public record;
- (f) Professional land surveying as defined in the Professional Land Surveying Act;
- (g) Individuals who are employed by and perform engineering services solely for a county, city and county, or municipality;
- (i) Individuals who are employed by and perform engineering services solely for the federal government;
- (j) Individuals who practice architecture as defined in the Architecture Practice Act;
- (k) Utilities or their employees or contractors when performing services for another utility during times of natural disasters or emergency situations.

§ 12-25-103(1), C.R.S.

Land Surveying

The Land Surveying Practice Act exempts the performance of the following activities:

- (a) The work of an employee or subordinate of a professional land surveyor if such work is performed under the responsible charge of the professional land surveyor;
- (b) The practice of employees of the federal government duly authorized under 43 U.S.C. sec. 772 and 43 CFR 9180.0-3, while engaged in the practice of surveying within the course of their federal employment in the state of Colorado; or
- (c) The rights of any other legally recognized profession.

§ 12-25-203(1), C.R.S.

SEALING AND SIGNING PROFESSIONAL WORK

Licensed architects, professional engineers, and professional land surveyors are, and should be, responsible for their professional services in their respective areas of expertise.

The public, as well as local officials, rely on the professional expertise of architects, engineers, and land surveyors. As a result, professional submissions such as construction documents must clearly show the identity of the licensed architect, engineer, or surveyor who prepared them by having affixed a seal and signature and otherwise complying with the requirements of state law. Without proper identification, ultimate responsibility for any deficiencies may not be clear.

The law and applicable codes in Colorado require that professional submissions be signed and sealed by the licensed architect, engineer, or surveyor who prepared them or has taken responsible control for them.

The following paragraphs reflect the laws and the rules specifying the sealing requirements for architects, engineers, and land surveyors.

Architects

12-25-317. Architect's stamp - record set of drawings.

(1) The use of an architect's stamp shall be subject to the following:

(a) The stamp, signature of the architect whose name appears on the stamp, and date of the signature of such architect shall be placed on drawings to establish a record set of drawings. A record set shall not be reproduced. A record set shall be prominently identified and shall be for the permanent record of the architect, the project owner, and the regulatory authorities who have jurisdiction over the project. This section shall not prohibit the creation of multiple record sets.

(b) The stamp and the date the document is stamped shall be placed on drawings prepared under the direct supervision of the architect and on the cover, title page, and table of contents of specifications. Subsequent issues of addenda, revisions, clarifications, or other modifications shall be properly identified and dated for the record set. Where consultant drawings and specifications are incorporated into the record set, they shall be clearly identified by consultant stamps or other means and dated in accordance with law to distinguish proper reference to origination.

(c) Except as required for compliance with a federal contract, the stamp shall not be placed on reproducible drawings used for multiple copies or on reproducible drawings that are transferred away from the architect's possession and supervision.

(d) A stamped record set with an original signature shall be retained in possession of the architect and shall be held for a minimum of three years following beneficial occupancy or beneficial use of the project by the owner or occupant.

(e) One original document may be stamped, signed, and dated pursuant to the requirements of federal government contracts.

(2) No person preparing plans and specifications for or construction contracts for the administration of any alteration, remodeling, or repair of any building shall use the title "architect" unless such person has been licensed as an architect pursuant to this part 3.

§ 12-25-317, C.R.S.

7.1 Sealing Requirements for Architects

7.1.1 Seal Specifications. Pursuant to Section 12-25-307(1)(e) C.R.S., each licensee shall procure a stamp, which shall be in the form of 2 concentric circles, the outer circle approximately 2 inches in diameter and the inner circle approximately 1 ¼ inches diameter. The words "State of Colorado" and "Licensed Architect" shall appear between the concentric circles at the top and bottom respectively. The name of the licensee and the license number of the licensee shall appear within the inner circle. This stamp shall comply in all respects, including size and format with the specimen shown below:



The stamp may be an embossing type, rubber stamp type, or electronically generated type and must be affixed directly to the reproduction drawings and specifications. The original signature of the individual named on the seal and the date of the signature shall appear across the face of each original seal imprint. Exception to this rule is allowed only as required for compliance with a federal contract.

7.1.2 Seal Application. A manual or electronic seal must be applied to the final reproduction of all of the following:

- (a) Each sheet of architectural drawings.
- (b) The cover, title page, and table of contents of specifications bound in book form.
- (c) The title page of details bound in book form and prepared specifically to supplement project drawings.

7.1.3 Signature and Date Required. The manual or electronic signature of the licensee and date of signature shall be affixed to the document. The signature of the licensee and date of signature shall appear through the seal.

7.1.3.1 Signature May Be Required by Public Agencies. A public agency may require a manual or electronic signature of the licensee on reproductions.

7.1.4 Sealing Documents That Are Not Final. When a licensee seals architectural documents that are not final, the status of the architectural documents must be identified as preliminary. Further qualifying descriptors may be added, e.g. “for review,” “not for constructions,” “for bid only.”

7.1.5 Limiting Scope of Responsibility. Licensees shall only sign, date, and stamp drawings, specifications, reports or other professional work for which they have direct professional knowledge and responsible control. When a licensee stamps, signs, and dates a document, it is presumed that responsibility has been assumed for the entire document unless the stamp is limited by a statement adjacent to the stamp that accurately reflects the licensee’s scope of responsibility for the document.

Board Rule 7.1

Engineers

12-25-117. Professional engineer seal.

(1) Upon receipt of a certificate of licensure, the newly licensed professional engineer may obtain a seal. A crimp type seal, a rubber stamp type seal, or an electronic type seal may be used. The seal shall be of a design approved by the board and shall contain the professional engineer's name and license number and the designation "Colorado licensed professional engineer". Colorado professional engineers licensed before July 1, 2004, may continue to use their prior existing seals.

(3) The seal and signature shall be used by an engineer only when the work being stamped was under the engineer's responsible charge.

§ 12-25-117, C.R.S.

5.1 Sealing Requirements for Professional Engineers

5.1.1 Seal Specifications. Pursuant to Section 12-25-117(1), C.R.S., the seal authorized by the State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors for licensees is of the crimp type, rubber stamp type, and/or computer generated type. The seal shall be of a design and size shown below. The diameter of the outer circle shall be nominally 1 5/8 inches (41 mm) and the diameter of the inner circle shall be nominally 15/16 inches (24 mm). The license number assigned shall be centered in the inner area of the seal in the space occupied by the word "NUMBER" and the size of the numbers shall be the same size of the letters in the word "NUMBER". The word "NUMBER" should not appear on the seal. Seals obtained prior to July 1, 2005 shall be deemed acceptable.



5.1.2 Seal Application. A manual or electronic seal must be applied to either the final reproducible, the final reproduction, or the final electronic record document of all of the following:

- (a) Each sheet of engineering drawings.
- (b) The cover, title page, and table of contents of specifications bound in book form.
- (c) The title page of details bound in book form and prepared specifically to supplement project drawings.
- (d) The title or signature page of engineering reports.

5.1.3 Signature and Date Required. The manual or electronic signature of the licensee and date of signature shall be affixed to the document. The signature of the licensee and date of signature shall appear through the seal.

5.1.3.1. Signature May Be Required By Public Agencies. A public agency may require a manual or electronic signature of the licensee on reproductions.

5.1.4 Sealing Documents That Are Not Final. When a licensee seals engineering documents that are not final, the status of the engineering documents must be identified as preliminary. Further qualifying descriptors may be added, e.g. “for review”, “not for construction”, “for bid only”.

5.1.5 Limiting Scope of Responsibility. When a licensee signs and seals a document, the licensee is responsible for the entire document unless the licensee limits the seal to one or more disciplines (e.g. civil, structural, mechanical, etc.) shown on the document. To limit the scope of responsibility for an engineering document to one or more disciplines, on the face of such document, the licensee must include a specific written statement adjacent to the seal that accurately reflects the scope of responsibility for the document.

All disciplines or aspects of the work shown on that document must be signed and sealed by the person(s) in responsible charge.

5.1.6 Specifying Manufactured Components in Designs. Licensees may specify manufactured components that are exempted by statute as part of design documents. "Manufactured components" for the purposes of this rule shall consist of such items as a pump, motor, prefabricated truss, or other type of item that is manufactured in multiple units for selection and use in projects that must be designed by professional engineers. Systems of manufactured components that are specific to a particular use or application must also be designed by a professional engineer. The licensee may show the manufactured component on the drawing or document and is responsible for the correct selection and specification of the manufactured components, but is not responsible for the proper design and manufacture of the manufactured components selected.

Board Rule 5.1

Surveyors

12-25-217. Professional land surveying seals.

(1) Upon receipt of a certificate of licensure, the newly licensed professional land surveyor may obtain a seal. A crimp type seal, a rubber stamp type seal, or an electronic type seal may be used. The seal shall be of a design approved by the board and shall contain the professional land surveyor's name and license number and the designation "Colorado licensed professional land surveyor". Colorado land surveyors licensed before July 1, 2004, may continue to use their prior existing seals.

(2) All documents, plats, and reports resulting from the practice of land surveying shall be identified with and bear the seal or facsimile and signature of the land surveyor in responsible charge.

(3) The seal and signature shall be used by a professional land surveyor only when the work being stamped was under such professional land surveyor's responsible charge.

§ 12-25-217, C.R.S.

6.1 Sealing Requirements for Professional Land Surveyors

6.1.1 Seal Specifications. Pursuant to Section 12-25-217(1), C.R.S., the seal authorized by the State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors for licensees is of the crimp type, rubber stamp type, and/or computer generated type. The seal shall be of a design and size shown below. The diameter of the outer circle shall be nominally 1 5/8 inches (41 mm) and the diameter of the inner circle shall be nominally 15/16 inches (24 mm). The license number assigned shall be centered in the inner area of the seal in the space occupied by the word "NUMBER" and the size of the numbers shall be the same size of the letters in the word "NUMBER". The word "NUMBER" should not appear on the seal. Seals obtained prior to July 1, 2005 shall be deemed acceptable.



6.1.2 Seal Application. Pursuant to Section 12-25-217, C.R.S., the professional land surveyor's manual or electronic seal must be applied to either the final reproducible, the final reproduction, or the final electronic record document of any of the following being delivered to the public:

- (a) Each sheet of documents and plats resulting from the practice of land surveying.
- (b) The title or signature page of surveying reports.

6.1.3 Signature and Date Required. The manual or electronic signature of the licensee and date of signature shall be affixed to the document. The signature of the licensee and date of signature shall appear through the seal.

6.1.3.1. Signature May Be Required by Public Agencies. A public agency may require a manual or electronic signature of the licensee on reproductions.

6.1.4 Sealing Documents That Are Not Final. When a licensee seals surveying documents that are not final, the status of the surveying documents must be identified as preliminary. Further qualifying descriptors may be added, e.g. "for review."

6.1.5 Limiting Scope of Responsibility. To limit a Professional Land Surveyor’s scope of responsibility on a document, the licensee shall include a written statement or certification that defines the surveying services performed under his or her responsible charge.

All aspects of the Professional Land Surveyor’s work shown on that document shall be sealed, signed, and dated by the licensee in responsible charge.

Board Rule 6.1

Electronic Seals and Signatures

In the laws and rules cited above, electronic sealing of professional work is permissible for architects, engineers and land surveyors.

Those professionals may also sign their work electronically provided the signature meets the Board’s requirements for electronic signatures:

Signature. The term signature shall include the terms “manual signature” or “electronic signature” and shall be defined as follows.

(a) Manual Signature. A manual signature is the handwritten name of a person applied to a document that identifies the person, serves as a means of authentication of the contents of the document, provides responsibility for the creation of the document and provides for accountability for the contents of the document.

(b) Electronic Signature. An electronic signature is a digital authentication process attached to or logically associated with an electronic document and shall carry the same weight, authority, and effects as a manual signature. The electronic signature, which can be generated by using either public key infrastructure or signature dynamics technology, must be as follows.

(i) Unique to the person using it.

(ii) Capable of verification.

(iii) Under the sole control of the person using it.

(iv) Linked to a document in such a manner that the electronic signature is invalidated if any data in the document are changed.

Board Rule 2.2 Definitions in Alphabetical Order – Signature

County requirements

Please note this citation: [30-28-205. County building inspector - permit required - appeal.](#)

(3) The county building inspector shall not issue any permit unless the plans and specifications for such proposed erection, construction, reconstruction, alteration, or remodeling conform to the regulations and restrictions in said building code. All such proposed erection, construction, reconstruction, alteration, or remodeling shall bear the seal of an architect or engineer licensed by the state of Colorado, unless the preparation of plans and specification is exempted by section 12-25-303, C.R.S. Such plans and specifications prepared by architectural or engineering

subdisciplines shall be so designated and shall bear the seal and signature of the architect or engineer for that subdiscipline.

International Building Code Requirements

The International Building Code (IBC) is common throughout Colorado. It states:

“The construction documents shall be prepared by a registered (licensed) design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.”

As a general rule, building officials should require that all construction documents for commercial properties have the seal and signature of either a licensed architect or engineer, as appropriate; or have a notation on the construction documents or building permit application stating that the plans are exempt from the general rule requiring them to be prepared by licensed architects or engineers in that jurisdiction. Building officials facing litigation or defending their actions in other arenas should not have to explain why they could have required construction documents to be prepared, signed and sealed by an architect or engineer, but chose to accept construction documents from an unlicensed individual when the law or building codes may not have allowed unlicensed individuals to prepare the construction documents in the first place.

PROFESSIONALS’ RESPONSIBILITIES

Defining responsible control of architectural work that is signed and sealed as required by law

Responsible Control of Architecture. The Board shall interpret “responsible control” of architecture, as defined in Section 12-25-302(7), C.R.S., as follows.

“Responsible control” of architecture shall mean that degree of control an architect is required to maintain over architectural decisions made personally or by others over whom the architect exercises supervisory direction and authority.

(a) The degree of control necessary for an architect to be in “responsible control” shall be such that the architect:

(i) Personally makes architectural decisions, or personally reviews and approves proposed decisions prior to their implementation, including consideration of alternatives whenever architectural decisions that could affect the life, health, property, and welfare of the public are made. In making said architectural decisions, the architect shall be physically present or, through the use of communication devices, be available as reasonably appropriate.

(ii) Judges the validity and applicability of recommendations prior to their incorporation into the work, including the qualifications of those making the recommendations.

(b) Architectural decisions that are made by, and are the responsibility of, the architect in “responsible control” are those decisions concerning permanent or temporary work that could create a danger to the life, health, property, and welfare of the public, such as, but not limited to, the following:

(i) The selection of architectural alternatives to be investigated and comparison of alternatives for architectural works.

(ii) The selection or development of design standards or methods, and materials to be used.

(iii) The selection or development of techniques or methods of testing to be used in evaluating materials or completed works, either new or existing.

(c) As a test to evaluate whether an architect is in “responsible control” the following must be considered: An architect who signs and seals architectural documents in “responsible control” must be capable of answering questions as to the architectural decisions made during the architect’s work on the project in sufficient detail as to leave little doubt as to the architect’s proficiency for the work performed. It is not necessary to defend decisions as in an adversarial situation, but only to demonstrate that the architect in “responsible control” made them and/or possessed sufficient knowledge of the project to make them. Examples of questions to be answered by the architect could relate to criteria for design, methods of analysis, selection of materials and systems, economics of alternate solutions, and environmental considerations. The individual should be able to clearly define the degree of control and how it was exercised and be able to demonstrate that the architect was answerable within said degree of control necessary for the architectural work done.

(d) An architect who adopts, signs, and seals work performed by others shall perform sufficient review and calculation to ensure that all standards of practice required of licensees are met, including satisfying the relevant criteria stated in paragraphs (b) and (c) above, and shall take professional responsibility for documents signed and sealed under his/her responsible charge.

Board Rule 2.2 Definitions in Alphabetical Order – Responsible Control of Architecture

Defining responsible charge of engineering work that is signed and sealed as required by law

Responsible Charge of Engineering. The Board shall interpret “responsible charge” of engineering, as defined in Section 12-25-102(14), C.R.S., as follows.

“Responsible charge” of engineering shall mean that degree of control an engineer is required to maintain over engineering decisions made personally or by others over which the engineer exercises supervisory direction and control authority.

(a) The degree of control necessary for an engineer to be in responsible charge shall be such that the engineer:

(i) Personally makes engineering decisions, or personally reviews and approves proposed decisions prior to their implementation, including consideration of alternatives whenever engineering decisions that could affect the life, health, property, and welfare of the public are

made. In making said engineering decisions, the engineer shall be physically present or, through the use of communication devices, be available in a reasonable period of time as appropriate.

(ii) Judges the validity and applicability of recommendations prior to their incorporation into the work, including the qualifications of those making the recommendations.

(b) Engineering decisions that are made by, and are the responsibility of, the professional engineer in responsible charge are those decisions concerning permanent or temporary work that could create a danger to the life, health, property, and welfare of the public, such as, but not limited to, the following:

(i) The selection of engineering alternatives to be investigated and comparison of alternatives for engineering works.

(ii) The selection or development of design standards or methods, and materials to be used.

(iii) The selection or development of techniques or methods of testing to be used in evaluating materials or completed works, either new or existing.

(c) As a test to evaluate whether an engineer is in responsible charge the following must be considered: An engineer who signs and seals engineering documents in responsible charge must be capable of answering questions as to the engineering decisions made during the engineer's work on the project in sufficient detail as to leave little doubt as to the engineer's proficiency for the work performed. It is not necessary to defend decisions as in an adversarial situation, but only to demonstrate that the engineer in responsible charge made them and possessed sufficient knowledge of the project to make them. Examples of questions to be answered by the engineer could relate to criteria for design, methods of analysis, selection of materials and systems, economics of alternate solutions, and environmental considerations. The individual should be able to clearly define the degree of control and how it was exercised and be able to demonstrate that the engineer was answerable within said degree of control necessary for the engineering work done.

(d) The term "responsible charge" does not refer to financial liability.

(e) A professional engineer who adopts, signs, and seals work previously engineered shall perform sufficient review and calculation to ensure that all standards of practice required of licensees are met, including satisfying the relevant criteria stated in paragraphs (b) and (c) above, and shall take professional and legal responsibility for documents signed and sealed under his/her responsible charge.

Board Rule 2.2 Definitions in Alphabetical Order – Responsible Charge of Engineering

Defining responsible charge of land surveying work that is signed and sealed as required by law

Responsible Charge of Land Surveying. The Board shall interpret "responsible charge" of land surveying, as defined in Section 12-25-202(10), C.R.S., as follows.

"Responsible charge" of land surveying shall mean that degree of control a professional land surveyor is required to maintain over land surveying decisions made personally or by others over which the land surveyor exercises supervisory direction and control authority.

(a) The degree of control necessary for a land surveyor to be in responsible charge shall be such that the land surveyor:

(i) Personally makes surveying decisions, or personally reviews and approves proposed decisions including consideration of field observation, physical evidence, and recorded data whenever surveying decisions that could affect the life, health, property, and welfare of the public are made. In making said surveying decisions, the land surveyor shall be physically present or, through the use of communication devices, be available in a reasonable period of time as appropriate.

(ii) Judges the validity and applicability of recommendations prior to their incorporation into the work, including the qualifications of those making the recommendations.

(b) Land surveying decisions that are made by, and are the responsibility of, the professional land surveyor in responsible charge are those decisions concerning work that could create a danger to the life, health, property, and welfare of the public, such as, but not limited to, the following:

(i) The selection of field observations, physical evidence, and recorded data to be investigated, compared, and analyzed.

(ii) The selection of methods or procedures to be used to accomplish the work.

(iii) Work products that comply with all relevant surveying statutes.

(c) As a test to evaluate whether a land surveyor is in responsible charge the following must be considered: A land surveyor who signs and seals documents in responsible charge must be capable of answering questions as to the surveying decisions made during the land surveyor's work on the project in sufficient detail as to leave little doubt as to the land surveyor's proficiency for the work performed. It is not necessary to defend decisions as in an adversarial situation, but only to demonstrate that the land surveyor in responsible charge made them and possessed sufficient knowledge of the survey project to make them. Examples of questions to be answered by the land surveyor could relate to criteria for the procedures of data collection, analysis of field data, recorded data and final determinations. The individual should be able to clearly define the degree of control and how it was exercised and be able to demonstrate that the land surveyor was answerable within said degree of control necessary for the surveying work done.

(d) The term "responsible charge" does not refer to financial liability.

(e) A professional land surveyor who adopts, signs, and seals work previously surveyed shall perform sufficient review and calculation to ensure that all standards of practice required of licensees are met, including satisfying the relevant criteria stated in paragraphs (b) and (c) above, and shall take professional and legal responsibility for documents signed and sealed under his/her responsible charge.

Board Rule 2.2 Definitions in Alphabetical Order – Responsible Charge of Land Surveying

Practicing within a professional’s area of expertise

As required by each of the practice acts and Board Rule 3.2.1, architects, engineers, and land surveyors are required to practice only within their area of expertise, as determined by their education, examination, and experience.

Architect or Engineer's Seal -- Which or Both?

Normally, the architectural portions of the documents must be sealed by a licensed architect, the engineering portions by a licensed professional engineer, and the surveys by a licensed professional land surveyor. Disclaimers should be used to indicate those portions of the work not prepared by the licensees affixing their seal and signature.

Architects may seal engineering drawings, engineers may seal architectural plans, and engineers may seal drawings reflecting a variety of engineering disciplines, but all may do so only when they have the expertise. The individual licensee is expected to know the limits of his or her abilities and knowledge.

Local officials may exercise their discretion in determining whether an individual has expertise in the area in which the licensee is submitting documents for review and approval by requesting information or documentation demonstrating expertise, such as transcripts or resumes. They may also contact the Board office with questions or concerns about a licensee’s expertise.

§§ 12-25-108(1)(g), 208(1)(g), 308(1)(g), C.R.S.; Board Rule 3.2

FREQUENTLY ASKED QUESTIONS AND ANSWERS

ABOUT TITLES...

Is there a difference between “registered” and “licensed” for architects, engineers, or land surveyors?

No. The terms are interchangeable, however, the preferred and current title is “licensed.”

Can an unlicensed person use the title “architect” or “engineer”?

The words “architect” and “engineer” by themselves may be considered generic and are not regulated. However, it is unlawful for anyone to use the title “Architect” in relationship to building services and “Professional Engineer” or its abbreviation unless licensed in Colorado. It is also unlawful to use any of the following titles unless licensed or exempted in Colorado:

Civil Engineer, Structural Engineer, Chemical Engineer, Petroleum Engineer, Mining Engineer Mechanical Engineer, or Electrical Engineer.

It is also unlawful for an unlicensed person to use the titles “architect” or “engineer” in any way that would misrepresent that he or she is licensed by the Board or that he or she is authorized to practice architecture or engineering.

§§ 12-25-102(11), 105, 302(1) and 305, C.R.S.

Can an unlicensed person use the title “surveyor” or “land surveyor”?

The word “surveyor” may be considered generic outside of land surveying and the determination and preservation of property boundaries. However, it is unlawful for an unlicensed person to use the title of “Land Surveyor” or “Professional Land Surveyor” unless licensed in Colorado. It is also unlawful to use the derivatives of land surveying in any way that would misrepresent that a person is licensed by the Board or authorized to practice land surveying.

§§ 12-25-202(7) and 205, C.R.S.

Can all licensed engineers use the titles or abbreviations of the titles, “Professional Engineer,” “Consulting Engineer,” “Licensed Engineer,” and “Registered Engineer”?

Yes. All engineers licensed in Colorado may use these titles.

ABOUT UNLICENSED PERSONS AND PRACTICE...

Can an unlicensed person offer architectural, engineering or land surveying services?

An unlicensed person cannot offer to practice architectural, engineering, or land surveying services, unless otherwise exempt.

§§ 12-25-105, 205, and 305, C.R.S.

What structures or parts of structures can an unlicensed person design?

An unlicensed person may plan, design and supervise the construction, alteration, remodeling, additions to, or repair of any of the following:

- One, two, three, and four unit family dwellings, including accessory buildings commonly associated with such dwellings;
- Garages, industrial buildings, offices, farm buildings, and buildings for the marketing, storage, or processing of farm products, and warehouses, that do not exceed one story in height, exclusive of a one-story basement, and under applicable building codes, are not designed for occupancy by more than ten persons;
- Nonstructural alterations of any nature to any building if such alterations do not affect the life safety of the occupants of the building.

§ 12-25-303(1), C.R.S.

Can an unlicensed person own an engineering or land surveying business?

An unlicensed person can own an engineering or land surveying business as long as a licensed Professional Engineer or Professional Land Surveyor is in responsible charge and directly responsible for the engineering work or land surveying work, respectively, provided by the company.

The exception is in the case of an engineering company that is a partnership, which must have at least one partner who is a Colorado licensed Professional Engineer.

§§ 12-25-104 and 204, C.R.S.

Can an unlicensed person own an architectural business?

Yes, as long as the practice of architecture by such entity is under the direct supervision of a Colorado licensed architect who is an officer of the corporation, a member of the limited liability company, or a partner in the registered limited liability partnership.

If the business has “architects” in its name, a majority of the business’ individual officers and directors or members or partners must be Colorado licensed architects or eligible to qualify for a license by endorsement.

§§ 12-25-304(1) and (3)(a), C.R.S.

Are there penalties for practicing or offering to practice architecture, engineering, or land surveying without a current Colorado license?

Yes. The Board is authorized to issue a Cease and Desist Order, apply for an injunction, and may be able to levy a fine up to \$5,000.

§§ 12-25-105(9), 109(8.2), 205(8), 208(8.2), 305(4), and 308(4), C.R.S.

ABOUT LICENSE STATUS AND PRACTICING...

Am I required to verify whether an individual who prepares sealed documents has a current license?

No, you are not required to do so by law. However, the Board encourages local officials and consumers to verify the licensure of all professionals regulated by DORA. You may verify licensure online at www.doradls.state.co.us/alison or email us at aes@dora.state.co.us or call 303.894.7800 or 303.894.7775.

Can someone with an expired, lapsed, retired, or inactive license still practice architecture, engineering, or land surveying, including signing and sealing documents?

No. If the license is expired, lapsed, retired, or inactive, the person cannot practice, offer to practice, or act as a consultant. However, as with any unlicensed individual, the person may work under the responsible charge of another licensee.

§§ 12-25-108(1)(n), 208(1)(n) and 305(1), C.R.S.

Can someone with a revoked, suspended, or surrendered license still practice architecture, engineering, or land surveying?

No. If the license has a status of revoked, suspended or surrendered, the person cannot practice, offer to practice, or act as a consultant. However, as with any unlicensed individual, the person may work under the responsible charge of another licensee.

§§ 12-25-108(1)(n), 208(1)(n) and 305(1), C.R.S.

If the license expired between the time the documents were prepared and the time when the local agency's review is performed, do the documents need to be re-sealed by a licensee with a current license?

As long as the license was current at the time the documents were prepared and sealed, the documents do not need to be re-sealed prior to review by the local agency. However, any changes (updates or modifications) to the documents that are made following the review by the local agency would have to be prepared by an actively licensed individual in responsible charge or control of the work performed and those changes would have to be signed and sealed.

ABOUT FIRMS...

Does an architectural, engineering or surveying business have to be licensed or registered with the Board?

No, but the company must be in compliance with business licensing requirements of the state of Colorado through the Secretary of State found at www.sos.state.co.us.

§§ 12-25-104, 204 and 304, C.R.S.

ABOUT BUILDING PERMIT APPLICATIONS...

Who can be the applicant for a building permit?

The applicant can be the owner, contractor, or the licensed architect or professional engineer as appropriate. However, for non-exempt buildings the name of the licensed architect or engineer should be listed on the application. All modifications or revisions to the signed and sealed construction documents required by the building official must be provided to the licensed architect or engineer by the building official.

ABOUT SCOPE OF PRACTICE...

Can architects prepare plans for grading work?

Yes. An architect responsible for preparation of a site plan is authorized to prepare site grading and drainage plans, if the architect has the expertise to perform such work. However, an architect may not determine property lines.

Can land surveyors prepare grading plans?

No, preparing grading plans is not within the scope of the practice of land surveying.

Can engineers establish horizontal and vertical controls for topographic surveys?

Yes, professional engineers and professional land surveyors can establish horizontal and vertical control for aerial mapping, topographic mapping, and planimetric mapping. However, when any controls are tied to, referenced to, or controlled by land lines or property lines, the controls must be established under the responsible charge of a Colorado licensed professional land surveyor.

Board Rule 5.8

May a Colorado professional engineer prepare, sign, and seal architectural construction documents?

Yes, when the engineer possesses the professional and technical qualifications to do so.

§ 12-25-303(5), C.R.S.

May a Colorado architect prepare, sign and seal engineering construction documents?

Yes, when the architect possesses the professional and technical qualifications to do so.

§ 12-25-103(1)(j), C.R.S.

How do I know if the professional is qualified to prepare, sign, and seal the construction documents?

You are authorized to require that the professional provide evidence of competence based on

education, licensure examinations, or experience. Licensees are required to practice within their area(s) of expertise and the individual licensee is expected to know the limits of his or her abilities and knowledge. If you have any concerns or questions, you may contact the Board office.

SEALING DOCUMENTS...

Must all plans or plats, specifications and reports contain an architect's, professional engineer's or professional land surveyor's seal and signature?

Only final documents – those which have been finalized, are ready for submittal for permit review, or for construction – are required to be signed and stamped. They must also include the date on which they are signed and stamped.

Sealed documents that are not final, such as drafts, preliminary documents, work-in-progress documents, or building department review documents, must be identified as preliminary. Additional descriptors, such as “preliminary,” “for plan check only,” or “not for construction” are acceptable.

Board Rules 5.1, 6.1, and 7.1

Can a local agency require all documents that are submitted for review to be signed and sealed?

Yes. However, sealed documents that are not final must be identified as preliminary.

Board Rules 5.1.3.1, 6.1.3.1, and 7.1.3.1

Can an unlicensed person use the seal or stamp of an architect, engineer, or land surveyor?

No. It is unlawful for anyone other than the licensee to use their stamp or seal plans, plats, specifications, reports, or documents under their responsible charge or control. An unlicensed individual cannot sign for a licensed person.

Board Rule 3.1.3

If a designer or owner or contractor prepares plans for a non-exempt building and applies for a building permit, should I, the building official, suggest they contact an architect or professional engineer to have their plans and specifications sealed?

No. Such action on the part of an architect or professional engineer would be contrary to law, and would put the professional's license in jeopardy. That is considered “plan stamping.” The permit applicant should be informed that the professional services which include construction documents must be prepared by, or under the personal supervision of a licensed design professional(s). Only the licensed professional who prepared the documents, or under whose immediate personal supervision they were prepared, may seal and sign the documents. The permit application should not be processed under any other circumstances.

§§ 12-25-117(3) and 317(1)(b), C.R.S. and Board Rule 3.2.2

Do submittal documents signed and sealed by an architect licensed in a state other than Colorado meet the requirements in Colorado?

No. Only architects currently licensed in Colorado have the authority to practice in Colorado. Professionals licensed in other states must obtain licensure in Colorado in order to practice here.

§§ 12-25-302(1) and 305, C.R.S.

Can a Colorado licensed architect, engineer, surveyor "overstamp" documents prepared and stamped by a professional who is licensed in another state?

No. "Overstamping" is not appropriate. A Colorado licensee may review and modify plans and plats prepared elsewhere, but by stamping and signing the plans, the architect, engineer, or land surveyor is taking responsible charge for them and in effect stating that the documents were prepared by him or her, or under his or her responsible control. The licensee must comply with the Board requirement for the definition of responsible control and charge.

Board Rule 2.2 Definitions in Alphabetical Order – Responsible Charge of Engineering, Responsible Charge of Land Surveying, and Responsible Control of Architecture

Does each sheet of construction documents have to be signed and sealed by a professional?

Yes.

For architectural submittals: Each sheet of architectural drawings; the cover, title page, and table of contents of specifications bound in book form; and the title page of details bound in book form and prepared specifically to supplement project drawings.

For engineering submittals: Each sheet of engineering drawings; the cover, title page, and table of contents of specifications bound in book form; the title page of details bound in book form and prepared specifically to supplement project drawings; and the title or signature page of engineering reports.

For surveying submittals: Each sheet of documents and plats resulting from the practice of land surveying; and the title or signature page of surveying reports.

Board Rules 5.1.2, 6.1.2, and 7.1.2

Who can sign and seal for portions of the design of buildings?

Licensed professionals designing a portion or portions of a building are in responsible charge of that portion of the project and are required to seal and sign the documents related to that portion of the project. The licensee must indicate on all documents exactly those portions of which he or she is in responsible charge with a statement adjacent to the stamp that reflects the scope of responsibility. Without a limitation of the seal, a licensee is responsible for the entire document.

Board Rules 3.2.3, 5.1.5, 6.1.5, and 7.1.5.

What are examples of specific component designs, i.e. roof trusses, curtain wall design, fire sprinkler, pre-manufactured buildings and other pre-manufactured elements, that are required to be signed and sealed by a licensed architect or engineer when submitted to the building official for approval?

Component, or "manufactured," buildings are treated no differently than other buildings or structures. Construction documents must be prepared, signed, and sealed by the appropriate Colorado licensed professional. Examples of such designs are: prefabricated metal buildings or structures, roof truss systems, post tension or pre-stress designs, and pre-cast concrete building components.

Who can design fire protection systems?

The design of fire protection systems constitutes the practice of engineering as defined by section 12-25-102(10), C.R.S., and would therefore require that a Professional Engineer be in responsible charge. Fire protection systems are interpreted by the Board to include, but not be limited to, fire detection systems, fire alarm systems, and fire suppression systems. The Board acknowledges the provisions of section 24-33.5-1206.2, C.R.S., administered by the Department of Public Safety, Division of Fire Safety.

Board Rule 2.2 Definitions in Alphabetical Order – Exemptions, Practice of Engineering, (c)
Design of Fire Protection Systems

What is meant by a pre-engineered building? Does it have to be sealed by a Colorado P.E.?

A pre-engineered building is composed of standardized components, usually with a metal structure, to be assembled on the building site. The engineering design pertaining to the structure is often done by a licensed professional engineer, employed by the manufacturer, unless the structure comes under an exemption in the Architecture Practice Act, and must be designed and stamped by a Colorado licensee.

Do shop drawings have to be signed and sealed by an architect or engineer and submitted to the building official for approval?

No. Typically, shop drawings are intended as construction or fabrication details. These are not usually part of the construction documents submitted for permit approval. However, they should be reviewed and signed by the architect or engineer in charge.

Shop drawings are the subcontractor's version of the design professional's intent, drawn to show and explain fabrication and installation instructions and details to the manufacturer and the contractor.

ABOUT LAND SURVEYING REQUIREMENTS...

Under what conditions does a plat have to be prepared and deposited?

(1) Every professional land surveyor who accepts a monument while performing a monumented land survey shall prepare and deposit a plat if such monument is not of record either in the clerk and recorder's office of the county in which the monument lies or in the public office designated by the county commissioners pursuant to section 38-50-101 (2) or if such monument is set pursuant to section 38-51-104.

(2) No plat shall be required to be prepared or deposited if the monuments accepted or set are within a platted subdivision that was filed in the clerk and recorder's office within the previous twenty years.

§ 38-51-107, C.R.S.

When does a survey plat have to be deposited?

Within twelve months after the date the monument is accepted in the field by a professional land surveyor performing a monumented land survey or is set by a professional land surveyor, be deposited with the public office designated by the county commissioners.

§ 38-50-101(1)(c), C.R.S.

What must be included on a land survey plat?

All land survey plats must include the following:

- (a) A scale drawing of the boundaries of the land parcel;
- (b) (I) All recorded and apparent rights-of-way and easements, and, if research for recorded rights-of-way and easements is done by someone other than the professional land surveyor who prepares the plat, the source from which such recorded rights-of-way and easements were obtained; or
(II) If the client wishes not to show rights-of-way and easements on the land survey plat, a statement that such client did not want rights-of-way and easements shown;
- (c) All field-measured dimensions necessary to establish the boundaries on the ground and all dimensions for newly created parcels necessary to establish the boundaries on the ground;
- (d) A statement by the professional land surveyor that the survey was performed by such surveyor or under such surveyor's responsible charge;
- (e) A statement by the professional land surveyor explaining how bearings, if used, were determined;
- (f) A description of all monuments, both found and set, that mark the boundaries of the property and of all control monuments used in conducting the survey. If any such boundary monument or control monument marks the location of a lost or obliterated public land survey monument that was restored as a part of the survey on which the plat is based, the professional land surveyor shall briefly describe the evidence and the procedure used for such restoration. If any such boundary monument or control monument marks the location of a quarter section corner or sixteenth section corner that was established as a part of the survey, the professional land surveyor shall briefly describe the evidence and procedure used for such establishment, unless

the corner location was established by the mathematical procedure as outlined in section 38-51-103.

(g) A statement of the scale or representative fraction of the drawing, and a bar-type or graphical scale;

(h) A north arrow;

(i) A written property description, which shall include but shall not be limited to a reference to the county and state together with the section, township, range, and principal meridian or established subdivision, block and lot number, or any other method of describing the land as established by the general land office or bureau of land management;

(j) The signature and seal of the professional land surveyor;

(k) Any conflicting boundary evidence; and

(l) A statement defining the lineal units used including but not limited to meters, chains, feet, and U.S. survey feet. If it is necessary to define conversion factors, the factors shall be a function of the meter as defined by the United States department of commerce, national institute of standards and technology.

§ 38-51-106(1), C.R.S.

What is the local official's responsibility for monument records?

Each month, the Board sends copies of filed monument records to the county clerk and recorder for the county in which the monuments are located. Each county clerk and recorder shall maintain copies of monument records in a file furnished by the board and, upon receipt of each such monument record, shall list it in a master index included with each such file. Records maintained pursuant to this section shall be open to public inspection during normal business hours.

§ 38-50-103(2), C.R.S.

What if you need more monument record binders?

Contact Board Staff at aes@dora.state.co.us or 303.894.7775 and we will be happy to help you.

What is an improvement location certificate or ILC?

An ILC is a representation of the boundaries of a parcel of land and the improvements on the parcel.

ILC's should not be relied upon as an "as-built" certification, for boundary determination, or for any future improvement lines to the property. It is not a land survey plat or an improvement survey plat.

§§ 38-51-101(8) and 108, C.R.S. and Board Rule 6.6 specify the requirements for ILC's.

What is an improvement survey plat?

An improvement survey plat is a land survey plat as defined in §38-51-101 (12) resulting from a monumented land survey showing the location of all structures, visible utilities, fences, hedges, or walls situated on the described parcel and within five feet of all boundaries of such parcel, any conflicting boundary evidence or visible encroachments, and all easements, underground utilities, and tunnels for which properly recorded evidence is available from the county clerk and recorder, a title insurance company, or other sources as specified on the improvement survey plat.

§ 38-51-101(9), C.R.S.

ABOUT REVIEWING SUBMITTALS...

If I review plans or plats submitted by an architect, engineer, or land surveyor and discover significant problems with the work, or I repeatedly review plans or plats from the same professional with numerous minor problems, what can I do?

You may provide the information to the Board at aes@dora.state.co.us or file a complaint at www.dora.state.co.us/aes. It is not necessary to “prove” your case but it is important to submit examples of the kind of work that you believe falls below the standard of practice. The Board will review or investigate the situation and take action as appropriate.

Sometimes I face a lot of resentment from architects, engineers, and land surveyors when I (or my Department) question their professional judgment during the review of their submissions. It’s nothing personal. We are only exercising our responsibility to properly review work to protect the health, safety, property, and welfare of the public. Is there anything the Board can do to intercede when these confrontations become really heated?

The Board does not have any authority or procedure to mediate these kinds of problems. However, the Board, with input from county and municipal representatives, developed guidelines that incorporate multiple perspectives of this difficult problem. The guidelines are available at www.dora.state.co.us/aes/guidelines. If you have encountered this problem, we encourage you to read this publication.

Is a local official liable if he or she informs the Board of a possible violation of law which later turns out to be unfounded and the licensee takes legal action against the official?

The law grants immunity to individuals who act as a witness or lodge a complaint in good faith to this Board.

§§ 12-25-118, 218 and 318, C.R.S.

ABOUT CHANGING PROFESSIONALS DURING A PROJECT...

What happens when a licensee does not complete a project and a new licensee takes over?

The new licensee (successor licensee) may assume responsible charge or control of a project and complete the project as long as he or she exercises the extent of responsible charge or control required by the statutes and Board Rules and assumes professional responsibility for these decisions. Thus, this successor licensee must perform sufficient review and calculation to ensure that all standards of practice required of licensees are met, as if the successor were the original licensee.

Board Rule 2.2 Definitions in Alphabetical Order – Responsible Charge of Engineering, Responsible Charge of Land Surveying, and Responsible Control of Architecture, Paragraphs (e)

ABOUT CHANGING SUBMITTED DOCUMENTS...

Can an owner, builder, or contractor make changes to a licensed architect's or engineer's construction documents?

No. When construction documents are prepared by a licensed professional, no changes may be made except by that professional, or under certain conditions, by another appropriately licensed professional.

§§ 12-25-105(7) and 305(1), C.R.S.

Who issues change orders and addenda to building permit construction documents that have been filed for non-exempt buildings or structures?

Change orders, additional construction documents, and addenda that alter the construction documents that are required to be filed with the building department for non-exempt buildings or structures must bear the signature and seal of the Colorado licensed architect or engineer responsible for the modifications.

ABOUT REUSING DOCUMENTS...

If a licensed professional has prepared sealed documents for a non-exempt project, may the owner or contractor reuse or resubmit those same plans for another project at another location?

No. A set of documents is prepared by a design professional for a specific site. Documents prepared by architects and engineers are instruments of service. Copyright laws may prohibit reproduction and contracts may prohibit or restrict reuse. Even if such prohibitions or restrictions do not apply, and even if the original design professional consents to reuse, the design professional must produce a completely new set of documents incorporating necessary site adaptations and code revisions or variations.

ABOUT PROVIDING COPIES OF SUBMITTED DOCUMENTS...

Can I make copies of signed and sealed documents submitted for review and provide them to others?

Architectural Documents

Copies of signed and sealed architecture drawings that constitute the record set cannot be copied and distributed to others. The law says,

“The stamp, signature of the architect whose name appears on the stamp, and date of the signature of such architect shall be placed on drawings to establish a record set of drawings. A record set shall not be reproduced. A record set shall be prominently identified and shall be for the permanent record of the architect, the project owner, and the regulatory authorities who have jurisdiction over the project. This section shall not prohibit the creation of multiple record sets.”

§ 12-25-317(1)(a)

Engineering Documents

Yes. There isn't a similar restriction in the Engineering Practice Act.

Land Surveying Documents

Yes. There isn't a similar restriction in the Land Surveying Practice Act.

ABOUT COMPLAINTS...

Who can file a complaint?

Anyone who believes there has been a violation of the Board's licensing laws may file a complaint. All complaints must be filed in writing with a description of the problem and as much identifying information as possible, such as plans, plats, pictures, maps, etc. Although a complaint form is not necessary, such forms are available from the Board office or on the Internet at www.dora.state.co.us/aes.

I don't really want to file a complaint, but...

If you believe there is reasonable evidence of substandard practice by a licensee, but you don't want to file a complaint against the licensee, you may submit information to the Board regarding your concerns about the licensee's work that you believe is below the minimum standard of practice. Be sure to provide sufficient information and evidence to document the basis of your concern. You may submit the documentation to aes@dora.state.co.us or by mail to the Board office at 1560 Broadway, Suite 1350, Denver, Colorado 80202.

Please contact us if you have any questions that we haven't addressed here...

Email: aes@dora.state.co.us

Telephone: 303.894.7775 - Board's Administrative Assistant

303.894.7792 - Board's Enforcement Supervisor

303.894.7781 - Board's Program Director

APPENDIX – SUGGESTED MINIMUM STANDARDS FOR CODE SUBMISSIONS

The required construction documents will depend upon the size, nature and complexity of the project. Each jurisdiction may be more specific through its development review process. The following is a suggested standard of the minimum required construction documents for review by building officials.

Construction documents for most projects consist of drawings, specifications and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information are the responsibility of the licensed architect or professional engineer. Construction documents submitted to the building official must be of sufficient detail to clearly show the project in its entirety with emphasis on the following:

1. Life safety
2. Means of egress
3. Barrier free accessibility
4. Structural integrity
5. Building code compliance
6. Definition of scope of work

Cover Sheet

1. Project identification
2. Project address and a location map
3. All licensed architects and engineers identified
4. The licensed architect or engineer in responsible control (the professional responsible for project coordination) shall be identified. All communications should be directed through this individual.
5. Design Criteria list:
 - I. Occupancy group
 - II. Type Construction classification
 - III. Location of property

- IV. Seismic risk
- V. Design loads
- VI. Structural systems
- VII. Square Footage/Allowable floor area
- VIII. Fire sprinkler systems
- IX. Height and number of stories
- X. Occupant load
- XI. Land use zone

Site Plan

Show proposed new building or structure and any existing buildings or structures, all property lines with dimensions, all streets, easements and setbacks. Show all water, sewer, communication services, natural gas, telephone, and cable TV. Electrical points of connection, proposed utility service routes and existing utilities on the site. Show all required parking, drainage and grading information. Indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes. A topographical survey should be provided with a benchmark elevation. Show north arrow. Show dimensions for the location and size of components delineated on the site plan.

Geotechnical Report

Provide a geotechnical report for the proposed structure at that site.

Exterior Elevations

Show each view. Show vertical dimensions and heights. Show openings and identify materials and show lateral bracing system, where applicable. Show dimensions and schedules.

Foundation Plan

Show all foundations and footings. Indicate size, locations, thickness, materials and strengths, and reinforcing. Show all imbedded anchoring such as anchor bolts, hold-downs, post bases, etc. Show dimensions for the location and size of all components delineated on the foundation plan.

Floor Plans

Show all floors including basements. Show all rooms, with their use, overall dimensions and locations of all structural elements and openings. Show all doors and windows. Provide door and window schedules. All fire resistance rated assemblies, areas of refuge, occupancy separations, fire blocking and draft stopping shall be shown. Show dimensions for the size of all rooms and the locations of other components delineated on the floor plans.

Framing Plans and Roof Framing Plans

Show all structural members, their size, methods and details of attachment, connections, location and materials for floors and roofs. Show roof plan. Show dimensions for the location and size of all components delineated on the roof plan.

Schedules

Room finishes, doors, hardware, windows, plumbing, mechanical, electrical and structural.

Addenda and Changes

It shall be the responsibility of the individual identified on the cover sheet as the licensed architect or engineer in responsible control to notify the building official of any and all changes throughout the project and provide revised construction documents, calculations or other appropriate documentation prior to commencement of that portion of the construction.

Revisions

The party submitting changes shall be identified at the beginning of the approval process. For clarity, all revisions should be identified and clouded on the construction drawings and appropriately marked in the project manual or resubmitted as a new set of construction documents.

Completeness of Documents

Construction Documents for most projects consist of drawings, specifications and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information is the responsibility of the licensed design professional.

Building Sections Wall Sections

Show materials of construction, non-rated and fire resistance rated assemblies, and fire resistance rated penetrations. Show dimensions.

Mechanical System

Show the mechanical system. Include all units, their sizes, mounting details, all ductwork and duct sizes. Indicate all fire dampers where required. Provide equipment schedules. Submit energy conservation calculations. Show dimensions.

Plumbing System

Show all fixtures, piping, slopes, materials and sizes. Show point of connections to utilities, septic tanks, pre-treatment sewer systems and water wells. Show dimensions.

Electrical System

Show all electrical fixtures (interior, exterior and site), wiring sizes and circuiting, grounding, panel schedules, single line diagrams, load calculations and fixture schedules. Show point of connection to utility. Show dimensions.

Fire Sprinkler System

Show all sprinkler heads, piping valves, alarms, tamper switches, materials, and sizes. Show point of connection to the water system and fire alarm system. Show dimensions for the size and location of components delineated on the fire sprinkler system drawings.

Structural Systems

Show foundation, structural members and where required provide structural calculations for the structural systems of the project. Include calculations indicating compliance with seismic, wind, snow and other design loads. Completeness of the necessary calculations is the responsibility of the licensed design professional.

Specifications

Prepare specifications to further define the construction components, the quality of the materials, delineation of the materials and methods of construction, wall, floor and ceiling finishes, exterior finishes, and descriptions of all pertinent equipment. Schedules may be incorporated into the project manual in lieu of being delineated on the construction drawings.