# Reference Manual for Building Officials

The Architects' Law and The Engineers' Law

Prepared for The Oregon Board of Architect Examiners

and

The Oregon State Board of Examiners for Engineering and Land Surveying

January 2005

## Contents

Foreword
Introduction
1. The Practices of Architecture and Engineering
The Practice of Architecture
The Practice of Engineering
2. Considerations for Building Officials When Issuing Building Permits . 1
Is an architect or engineer required on a project?
Exempt Buildings
Non-Exempt Buildings
Significant Structures
3. Stamping Requirements for Architects and Engineers 15
Professional Stamp (Architect)
Professional Stamp (Engineer)
Supervision (Documents)
Supervision (Construction)
The Implications of Design Build
4. Frequently Asked Questions and Commentaries
5. The Complaint Process
6. Helpful Contacts

## Foreword

This manual has been prepared and published jointly by the Oregon Board of Architect Examiners (OBAE) and the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS) in consultation with Oregon Building Codes Division (BCD), in order to aid Oregon Building Officials and the general public in understanding the laws governing the practices of architecture and engineering in Oregon.

This information is provided as part of a continuing effort to safeguard health, safety, and property/welfare through proper enforcement of the legal requirements for design, supervision, construction, and inspection of buildings in Oregon.

For further information, write or telephone:

#### Oregon Board of Architect Examiners (OBAE)

205 Liberty Street NE, Suite A Salem, OR 97301 Phone: (503) 763-0662 Fax: (503) 364-0510 Email: architectboard@orbae.com Web site: www.orbae.com

#### Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS)

728 Hawthorne Avenue, NE Salem, OR 97301 Phone: (503) 362-2666 FAX: (503) 362-5454 Email: osbeels@osbeels.org Web site: www.osbeels.org

#### Oregon Building Codes Division (BCD)

1535 Edgewater, NW PO BOX 14470 Salem, OR 97309 Phone: (503) 378-4133/ 1 (800) 442-7457 FAX: (503) 378-2322 Email: bcd.webmaster@state.or.us Web site: www.cbs.state.or.us/bcd/

## Introduction

The charge given to building officials is to assure building construction in Oregon is... protecting the safety, health, and property/welfare of Oregon citizens The charge given to a building official through BCD is similar to that given to OBAE and OSBEELS: protecting the safety, health, and property/welfare of Oregon citizens to promote safe building construction in this State. This is accomplished through the following: administration and interpretation of the building code; inspection of building construction to the building code requirements; plan review to the building code requirements; licensing for code enforcement; and permit services to the construction industry.

BCD has statutory authority for the enforcement and administration of

- Oregon Structural Specialty Code (non-low-rise residential structures)
- Prefabricated structures
- The Low-Rise Residential Code
- Manufactured dwellings and structures, parks, and tourist facilities
- Energy conservation codes
- The elimination of architectural barriers (ADA and accessibility requirements) in buildings
- The Mechanical Code
- The Plumbing Code
- The Electrical Safety Code
- The Boilers and Pressure Vessels Code
- The Elevators and Amusement Rides and Devices Code
- Certification and training of inspectors

It is important to clarify the roles of BCD, OBAE, and OSBEELS, as well as the individual practices of the architect and of the engineer.

BCD administration consists of several staff roles, of which three are highlighted here:

#### **The building official** is required to enforce the state building codes

1. The building official is required to enforce the state building codes that govern the construction, reconstruction, alteration, and repair of buildings and other structures and the installation of mechanical devices and equipment, and require the correction of unsafe conditions caused in existing buildings. The state building codes establish uniform performance standards to provide reasonable safeguards for the health, safety, welfare, comfort, and security of the residents of this state. Part of the building official's review when issuing building permits includes ensuring that an architect and/or engineer created the construction documents when required by code and law, and to ensure that these documents comply with the minimum requirements of the state's adopted building codes.

2. The plans examiner examines the plans for code compliance. The plans examiner provides code interpretation guidance and council on technical issues, and examines plans and other documents for compliance of the codes listed above. However, the plans examiner does not perform architectural or engineering design.

**3.** The building inspector observes construction to assure code compliance. For this manual, the term building official encompasses the global role of all three responsibilities.

OBAE and OSBEELS assure the public that only those individuals who have met minimum professional standards of education, experience, and examination may plan, design, and supervise the erection of non-exempt structures.

There may be confusion as to when to employ an architect or engineer on a particular project. The architect is educated in a broad scope of subjects covering both functional and aesthetic areas of building design. The registered architect is expected to understand, assemble, and coordinate all of the disciplines and specialties that a building comprises. The architect is concerned with the creation and adaptation of space primarily for use and occupancy by human beings. Often, the architect is expected to act in the capacity of a "generalist" in the design process.

The engineer is educated in subjects that focus on the technology of one specific functional system that the building comprises. The engineer applies mathematics and principles of engineering to design components that include, but are not limited to, the civil, electrical, mechanical, and structural components of the building. In addition, the practice of engineering may include surveying to determine area or topography; surveying to establish lines, grades, or elevations, or to determine or estimate quantities of materials required, removed, or in place; or surveying for the design and construction layout of engineering and architectural infrastructure.

There is a grey area where the architect's practice may overlap the engineer's practice. The architect has been generally educated in the civil, mechanical, structural, and electrical technologies, and may practice in these areas to the extent that the architect is competent based on experience and knowledge in the area of work. However, an architect generally retains engineers on projects that are complex, or outside the architect's level of competence. The architect typically hires engineers, such as structural, civil, mechanical, electrical, etc., as consultants. Often this professional team works THE PLANS EXAMINER

EXAMINES THE PLANS FOR CODE COMPLIANCE

The building inspector Observes construction to assure code compliance

**The Architect** IS EDUCATED IN A BROAD SCOPE OF SUBJECTS COV-ERING BOTH FUNCTIONAL AND AESTHETIC AREAS OF BUILDING DESIGN.

The Engineer IS EDUCATED IN SUBJECTS THAT FOCUS ON THE TECHNOLOGY OF ONE SPECIFIC FUNCTIONAL SYSTEM THAT THE BUILDING COMPRISES.

THERE IS A GREY AREA WHERE THE ARCHITECT'S PRACTICE MAY OVERLAP THE ENGINEER'S PRACTICE. together to prepare contract documents consisting of drawings and technical specifications that detail how a project is to be built. The architect or respective engineer stamps only those sections of the construction documents over which they have responsible control.

In order to assure compliance with the state building codes, building officials sometimes have questions regarding the requirements for architects and engineers on projects, based on the laws governing the practice of architecture and engineering in Oregon. In addition to information provided by BCD, building officials rely on OBAE and OSBEELS as sources of information and support. This reference manual is provided as a source of ready information to assist the building officials around the state and address some of their most frequently asked questions. It is not meant to supersede the building code requirements or the rules and laws regulating the practice of architecture and engineering in Oregon.

#### Note:

Text in this manual that is in *italics* is the actual wording from the Oregon Revised Statutes (ORS) or Oregon Administrative Rules (OAR). Any references to the ORS, OAR, and codes were accurate at the time this document was published (January 2005). The last page of this document lists the web sites for the most current versions of the architecture and engineering laws and rules.

## The Practices of Architecture and Engineering

### The Practice of Architecture

#### ORS 671.020 states:

"In order to safeguard health, safety and welfare and to eliminate unnecessary loss and waste in this state, a person may not practice the profession of architecture...without first qualifying before the State Board of Architect Examiners and obtaining a certificate of registration..."

The "practice of architecture" means any one or combination of the following practices by a person or firm:

- Planning.
- Designing
- Supervising the erection, enlargement, or alteration of any building or of any appurtenance thereto other than for exempted buildings.

ORS 671.010(6) defines the practice of architecture as any one or combination of the following practices by a person:

"The planning, designing or supervision of the erection, enlargement, or alteration of any building or of any appurtenance thereto other than exempted buildings."

#### **Commentary:**

The architect is an individual who after education, practical experience, and examination has satisfied OBAE of proven competence, and is licensed to practice architecture in Oregon. The "practice of architecture" is defined in ORS 671.010(6) and OAR 806-010-0075, and relates to the professional activities of the registered architect. These activities include

"all analysis, calculations, research, graphic presentation, literary expression, and advice essential to the preparation of necessary documents for the design and construction of buildings, structures and their related environment whether interior or exterior."

Only those architects who hold an active Oregon registration may practice architecture in this state.

### The Practice of Engineering

ORS 672.020 states:

"In order to safeguard life, health, and property, no person shall practice or offer to practice engineering in this state unless the person is registered and has a valid certificate to practice engineering ..."

in Oregon.

The "practice of engineering" means any professional services requiring:

- Engineering education, training, and experience and
- Application of special knowledge of the mathematical, physical, and engineering sciences.

The following services may be offered by an Oregon registered engineer under ORS 672.005:

"consultation, investigation, testimony, evaluation, planning, design and services during construction, manufacture, or fabrication for the purpose of ensuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works or projects."

#### **Commentary:**

In the state of Oregon, engineers may hold a certificate of registration in one or more of the following disciplines:

Acoustical	Manufacturing
Agricultural	Industrial
Chemical	Mechanical
Civil	Metallurgical
Control Systems	Mining
Electrical	Naval Architectural/Marine
Environmental	Nuclear
Fire Protection	Petroleum
Forest	Structural*
Geotechnical	Traffic

Oregon Administrative Rule (OAR 820-020-0020(1)) states that registrants shall perform only in their areas of competence. The item marked with (\*) is a specialty discipline that requires unique experience and examination in addition to those mandated in any of the other disciplines of engineering. Refer to OAR 820, division 40 for further detail. A 1983 opinion from the Assistant Attorney General states that a person must be registered in Oregon before they use the title "engineer" in the practice of engineering. ORS 672.002 to 672.325 address the concern for consumer protection and the public good, and permit only registered and certified personnel to practice engineering. Only those engineers who hold registration in Oregon, or are registered in another state and have obtained a temporary permit, may practice engineering in this state.

ORS 672.007 defines the acts constituting practice of engineering, as follows:

"(1) Within the meaning of ORS 672.002 to 672.325, a person shall be considered practicing or offering to practice engineering who: (a) By verbal claim, sign, advertisement, letterhead, card or in any other way implies that the person is or purports to be a registered professional engineer;

(b) Through the use of some other title implies that the person is an engineer or a registered professional engineer; or

(c) Purports to be able to perform, or who does perform, any service or work that is defined by ORS 672.005 as the practice of engineering."

There has been confusion as to the extent to which the professional engineer may practice land surveying. Below are some examples that may apply to the practice of engineering or the responsibility of professional engineers. The descriptions below provide general guidance and are not to be considered allinclusive. For further detail refer to ORS 672.005 and ORS 672.007.

- Surveying to determine area or topography, to establish lines, grades, or elevations, or to determine or estimate quantities of materials required, removed, or in place.
- Surveying required for design and construction layout of engineering and architectural infrastructure.

The **professional land surveyor** is uniquely qualified to practice surveying in order to

"establish, reestablish or restore land boundaries, corners or monuments between lands not held in common ownership or intended for conveyance." (ORS 672.025(3))

ORS 672.007 defines the acts that constitute the practice of land surveying as follows:

"(2) Within the meaning of ORS 672.002 to 672.325, a person is practicing or offering to practice land surveying who: (a) By verbal claim, sign, advertisement, letterhead, card or in any other way implies that the person is or purports to be a land surveyor;

(b) Through the use of some other title implies that the person is a land surveyor; or

(c) Purports to be able to perform, or who does perform, any land surveying service or work or any other service that is defined by ORS 672.005 as the practice of land surveying."

#### **Commentary:**

Sometimes there is a question as to when it is appropriate for an architect, an engineer, or both to be involved on a project. The answer depends on the type of project. The following are a few examples:

*Case A:* A residential subdivision of detached single family residences is being constructed, where streets, storm water drainage systems, single family homes, etc. will be included in the scope of work. In this case, a land surveyor and an engineer would be required to prepare calculations/documents for the boundary and infrastructure of the subdivision, respectively. An architect would not be required to design the homes because single family residences are exempt from the architects' law. However, an architect who is hired to perform the work on such a residence is required to stamp/sign the documents meant for construction/permit of the home.

**Case B:** A multi-unit residential apartment development is being constructed on a site where streets, storm water drainage systems, etc. have already been constructed. In this case, an architect would be required to prepare plans for the buildings. If the architect does not have the expertise in a particular area of building systems design, the architect would hire the appropriate engineering services.

**Case C:** A project consists of a large shopping mall with nine acres of parking. An architect would be required for the functional building design. The architect or engineer would be required to provide the design of the building systems, and engineers would be required where the systems are complex. While the parking lot could be considered "an appurtenance to the building" according to architects' law, thus allowing architects by law to provide the design, many local jurisdiction storm water quality requirements are much more complex, and lend the need for engineering services.

## Considerations for Building Officials When Issuing Building Permits

## Is an architect or engineer required on a project?

One of the first assessments to be done by the building official when receiving plans for construction permits is a determination as to whether or not the project is required to be designed by an architect or engineer. Besides the Oregon Structural Specialty Code (OSSC), there are three important definitions that come from the architects' and engineers' laws and rules. The first two are "exempt" and "non-exempt" buildings as defined in the architects' laws. The third term, "significant structures," is found in the engineers' laws. Additionally, the OSSC defines a "Design Professional in Responsible Charge" (formerly known as "Architect or Engineer of Record").

## **Exempt Buildings**

The architects' and engineers' laws and rules provide an area where a person who is not registered as an architect or engineer may plan, design, and supervise the erection, enlargement, or alteration of a building. These buildings are considered **exempt**.

The following are exempt from the architects' and engineers' laws:

- 1. Single family residential dwellings.
- 2. Farm/agriculture buildings, as provided in ORS 455.315(2) as follows:
  (a) "Agricultural building" means a structure located on a farm and used in the operation of the farm for:

A) Storage, maintenance or repair of farm machinery and equipment;

(B) The raising, harvesting and selling of crops;

(C) The feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or

honeybees;

(D) Dairying and the sale of dairy products; or

(E) Any other agricultural or horticultural use or animal

husbandry, or any combination thereof, including the

preparation and storage of the produce raised on the farm for human use and animal use and disposal by marketing or otherwise.

(b) "Agricultural building" does not include:

(A) A dwelling;

(B) A structure used for a purpose other than growing plants in which 10 or more persons are present at any one time;

(C) A structure regulated by the State Fire Marshal pursuant to ORS chapter 476;

(D) A structure used by the public; or

(E) A structure subject to sections 4001 to 4127, title 42,

United States Code (the National Flood Insurance Act of 1968) as amended, and regulations promulgated hereunder.

(c) "Equine facility" means a building located on a farm and used by the farm owner or the public for:

(A) Stabling or training equines; or

(B) Riding lessons and training clinics.

(d) "Equine facility" does not include:

(A) A dwelling;

(B) A structure in which more than 10 persons are present at any one time;

(C) A structure regulated by the State Fire Marshal pursuant to ORS chapter 476; or

(D) A structure subject to sections 4001 to 4127, title 42, United States Code (the National Flood Insurance Act of 1968) as amended, and regulations promulgated thereunder.

3. Structures used in connection with, or auxiliary to, single family dwellings or farm buildings. These include but are not limited to three-car garages, barns, sheds, or shelters used for housing of domestic animals, or livestock. (ORS 672.129).

4. Any other building where the ground area is 4,000 square feet or less and is not more than 20 feet in height from the top surface of the lowest flooring to the highest overhead interior finish. The architects' rule OAR 806-010-0065 defines ground area and height limitations:

(1) "Ground Area" shall mean any projected or suspended occupied areas above the ground level in combination with areas in contact with the ground. Measurements in determining the ground area shall be taken from outside wall to outside wall and shall include the sum of the areas of all additions and the area of the original structure. The ground area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

(2) "Height" shall be measured from the top surface of the lowest flooring to the highest interior overhead finish of the structure in determining whether a building exceeds the 20 foot height limitation. A basement floor is considered the lowest flooring when useable (i.e., storage, garage, etc.). 5. The planning, designing, specifying, or supervising of the alterations or repairs to a building when the structural elements of a building are not involved, or when the occupancy or code-related classification of the building, or portion of the building, has not changed.

#### **Commentary:**

For a building to be considered exempt under the height and ground area limitations, it must be under **both** limitations; otherwise it would not qualify as an exempt building.

The definition of height in OAR 806-010-0065 is different from height as defined in the OSSC where height is used to determine the need for sprinklers, building construction type, etc. The definition of height in the architects' rules is used to determine whether an architect is required for the project. The two different definitions serve two separate and distinct purposes.

## Non-Exempt Buildings

Except for single family dwellings and farm/agriculture buildings, all buildings exceeding the exempt size limitation—ground area of over 4,000 square feet, or height limit of over 20 feet in height—are considered **non-exempt** buildings. The services of a registered professional are required if either limitation is exceeded.

### Significant Structures

A registered structural engineer or a registered architect qualified by experience and knowledge in this area of work are the only professionals allowed to prepare plans, specifications, computations, or other structural engineering services involving the primary frame or load resisting system, including its elements or parts, on projects defined as **significant structures**.

The engineers' law ORS 672.129 defines significant structures as: "(A) Hazardous facilities and special occupancy structures, as defined in ORS 455.447;

(B) Essential facilities, as defined in ORS 455.447, that have a ground area of more than 4,000 square feet and are more than 20 feet in height;

(C) Structures that the Director of the Department of Consumer and Business Services determines to have irregular features; and
(D) Buildings that are customarily occupied by human beings and are more than four stories or 45 feet above average ground level."

#### **Commentary:**

Below are examples of determinations of exempt and non-exempt structures.

**Case A:** The interior of a 750-square-foot space within an existing 8,000-square-foot building will be remodeled. The scope of work includes structural modifications. Although the office being remodeled is less than 4,000 square feet, it is a non-exempt project because the square footage of the entire existing structure must be considered when determining whether the building meets the ground area limitations of an exempt structure. It would also be non-exempt because structural modifications are included in the scope of work.

**Case B:** A 4,050-square-foot structure is being remodeled. There will be no structural modifications, but the occupancy classification will change from a single family residence to a coffee house. Since this is a remodel involving interior space planning/renovations and there are no structural modifications, one might believe this to be an exempt building, but it is not because of the change in the occupancy classification. If the remodel had not changed the occupancy code classification, without any structural modifications, then this would be considered an exempt structure.

**Case C:** A 2,000-square-foot small office will be remodeled by adding a second story to the existing space. The renovations will cause the office to exceed 20 feet in height, and will also include a new stairway to the second floor. Due to the increased height of the structure, and the structural modifications, this is now considered a non-exempt structure.

**Case D:** A 2,185-square-foot residential condominium is being remodeled to attach the roofline of an adjacent condominium of the same square footage. By attaching these structures, the building now becomes non-exempt as the entire square footage of the structure would exceed 4,000 square feet.

**Case E:** A four-story hospital is being designed in a small community. This building is non-exempt, and the structure will need to be designed by a licensed structural engineer or architect who is qualified in designing complicated structures. It is also considered to be a significant structure.

## Stamping Requirements for Architects and Engineers

The terms "stamp" and "seal," as used in this manual and in the architectural and engineering laws and rules, are synonymous and thereby used interchangeably.

### Professional Stamp (Architect)

Every registered architect is required by law to obtain a stamp bearing his or her name only, together with the city and state in which the architect's principal office is located. The stamp must bear the legend, "REGISTERED ARCHITECT, STATE OF OREGON." The following is a facsimile of the design and the lettering of the stamp:



#### ORS 671.020(5) states:

"All drawings and the title page of all specifications intended for use as construction documents in the practice of architecture must bear the stamp of a registered architect and be signed by the architect." OAR 806-010-0045(3) requires that the

"stamp with the registrant's handwritten signature must appear on the original title page of specifications and on every sheet of the drawings intended for permit and construction, whether or not the project is exempt... The originals may be reproduced for permit and construction purposes."

Modifications to construction documents, additional drawings, and specifications that become part of change orders and/or addenda to alter those documents must bear the stamp and signature of the registered architect or engineer responsible for the modifications (OAR 806-010-0115).

Registered architects are required to place their stamp and signature on all construction documents relating to architectural work that they perform, whether the building or structure in question is exempt or non-exempt (OAR 806-010-0045(3)). Preliminary drawings not intended to be used as construction

documents are not required by law to be stamped. Only those documents that are ready to be used for construction should be so stamped and signed.

#### **Commentary:**

#### Reviewing/Stamping:

The architect must exercise the requisite professional judgment about, and make the decisions upon, all matters embodied within the construction documents they have stamped and signed. According to ORS 671.020(5), the signature and stamp constitute

"certification that the architect has exercised the requisite professional judgment about and made the decisions upon all matters embodied within those construction documents, that the documents were prepared either by the architect or under the direct control and supervision of the architect and that the architect accepts responsibility for them."

Architects who are provided with a pre-existing set of plans may not simply review and sign them (OAR 806-010-0045(5)(a) and (b) and 806-010-0120).

All construction documents issued by an architectural firm, corporation, or partnership are required by law to bear the corporate or assumed business name, in addition to the stamp and signature of the responsible architect (ORS 671.041(3)).

#### Professional Stamp (Engineer)

Each registered professional engineer shall, upon registration, obtain a seal of the design authorized by OSBEELS. Every final document, or the cover or closing page of a bound document—including but not limited to drawings, calculations, specifications, designs, reports, narratives, maps, and plans issued by a registrant—shall be stamped with the seal and signed by the registrant. ORS 672.020 states:

"The signature and stamp of a registrant constitute a certification that the document was prepared by the registrant or under the supervision and control of the registrant."

"Final document" is defined by OSBEELS as any document presented to a client or public agency that is not clearly noted as being "preliminary."

The following is a facsimile of the design and the lettering of the stamps:





#### **Commentary:**

OSBEELS has determined the following with respect to seals:

- Seals may be computer-generated or stamped with ink. However, a signature must be "wet," meaning that it is handwritten. The engineers' law and rules do not allow electronic signatures.
- Original seals must be of the size as shown above. Reduced-size original seals are not permitted on an original plan set. However, copy reductions of an original document are permitted.
- It is not acceptable to use an out-of-state engineer's seal on Oregon projects unless a temporary permit has been issued by OSBEELS with approved verbiage as currently issued by OSBEELS.
- When a final document requires the expertise of more than one registrant, the document will contain stamps and signatures on that portion for which the registrant maintained supervision and control of the work. In order to maintain clarity of responsibility, OAR 820-010-0623 provides

"no more than one registrant will seal documents unless it is clearly explained and denoted on the document by all registrants which portion of the work each registrant prepared and for which each registrant is responsible."

When possible, it is most appropriate for the registrant to prepare **separate** drawings and calculations indicating exactly what the registrant has designed and for what he or she is taking responsibility.

Authorization under ORS 479.860 allows supervising electricians who hold a supervising electrician's license to design, plan, or lay out electrical installations for persons who will purchase their installation services. ORS 479.860 does not authorize an electrical supervisor to prepare drawings for contractors, architects, or developers where those persons will not be purchasing the electrical installation services, called for by the drawings, from the supervising electrician's employer-contractor.

Reference Manual for Building Officials: The Architects' Law and the Engineers' Law

### Supervision (Documents)

#### Architect:

In accordance with ORS 671.020(5), all work bearing the stamp and signature of an architect must have been prepared under the architect's **direct control and supervision**, which, according to OAR 806-010-0045(5), means that the architect

"has exercised directing, guiding and restraining power over the preparation of the documents ... and has exercised his or her professional judgment in all architectural matters embodied within the documents,"

and the architect accepts responsibility for them. The same rule states that these documents

"were prepared under the responsible direction of the architect" and that the rule

"is not intended to preclude the use of current technology or the use of standard details and product specifications in accomplishing the above objectives."

#### Engineer:

ORS 672.002. Definitions for ORS 672.002 to 672.325 discuss responsible charge of engineering work as follows:

(6) "Responsible charge" means to have supervision and control of:(a) The engineering design of works with responsibility for design decisions; or

(b) Land surveying work for the purpose of ensuring conformance to the relevant requirements of law and sound surveying practice.

(7) "Supervision and control" means establishing the nature of, directing and guiding the preparation of, and approving the work product and accepting responsibility that the work product is in conformance with standards of professional practice.

OAR 820-010-0010(9) states that

"'under direct supervision and control' shall be construed to mean that the engineer or land surveyor providing such supervision shall have made the decisions on technical matters of policy and design and shall have exercised their own professional judgment in all engineering and land surveying matters that are embodied in the plans, design, specifications, or other documents involved in the work. By applying their seal to the final documents, they accept responsibility thereof."

#### **Commentary:**

All drawings and the title page of specifications for non-exempt buildings must be stamped and signed by an Oregon registered professional, and each individual document must bear the stamp of the professional responsible for its preparation. It is common for a set of construction documents to include individual drawings and specifications prepared and stamped by the appropriate professionals.

If the documents for an exempt structure are prepared by an architect, the documents must be stamped and signed according to ORS 671.025(2) and OAR 806-010-0045(3). If the documents for an exempt structure are prepared by an engineer, the documents are not required to be stamped under the current laws and rules.

#### Supervision (Construction)

#### Architect:

OAR 806-010-0050 defines supervision of construction

"as related to the practice of architecture shall mean the administration of the construction contract which includes:

- (a) General administration of contracts and interpretation of construction documents during the construction phase;
- (b) Observation of construction and evaluation of the work;
- (c) Review of contractor's submittals; and

(d) Determination of substantial completion, and such other services as may be required in accordance with the accepted practice of architecture in Oregon."

According to OAR 806-010-0050, supervision of the erection of nonexempt structures must be provided by an Oregon registered architect or engineer, or someone under their direct control, who is capable of rendering independent judgment on matters related to construction.

Oregon registered architects are charged with providing supervision of all work bearing their stamp and signature. Under certain conditions, if an architect will not be performing this supervision, they must notify all involved permit-issuing agencies and OBAE of this fact. Supervision performed by an owner, contractor, or any other person not registered as an Oregon architect or someone under an architect's direct control is in violation of the statute. Under the administrative rules of OBAE, the only exception is that architects are not required to provide supervision during the construction phase for single family residences.

#### Engineer:

The engineers' laws and rules are silent on requirements for construction supervision by engineers.

#### Design Professional in Responsible Charge:

"Design Professional in Responsible Charge" from OSSC 106.3.4 states: "When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties."

The architects' laws and rules require that OBAE and the building official be notified by the architect when the architect will not be providing supervision (OAR 806-010-0050(2)). The engineers' laws and rules are silent on this issue.

OSSC 106.3.4 continues:

"The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building."

Deferred submittals are those portions of the design that are not submitted at the time of the application.

#### **Commentary:**

If an architect's or engineer's professional judgment is overruled under circumstances where the life, health, and property of the public may be endangered, they must inform the employer or client of the possible consequences and notify the appropriate building officials, according to OAR 806-020-0020 and OAR 820-020-0015(1).

### The Implications of Design Build

Within the construction industry the phrase "design build" is used most often when a construction contractor is offering architectural or engineering services as appurtenant to construction services. All of the laws and regulations regarding the practices of architecture and engineering still apply. OAR 806-010-0078 and OAR 820-010-0715 establish the conditions under which a construction contractor can offer architectural or engineering services. It is clear under these rules that the architectural and engineering services themselves are to be provided by an architect and engineer, not the contractor. For the building official, this means that all construction documents submitted for permit for non-exempt buildings must be stamped and signed by the appropriate professional.



### Appurtenances

#### 1. What are considered appurtenances to a building/structure?

Architect Rule OAR 806-010-0125 defines the term "appurtenances" as "those systems, equipment and/or elements, whether interior or exterior, that are necessary to the overall function of a building."

## 2. Does the design of appurtenances for non-exempt building/structures have to be done by a registered professional?

Yes. Depending upon the level of expertise required, the appurtenances would require the services of an engineer and/or architect.

## **Exempt vs. Non-Exempt Structures:**

## 3. How do I measure the square footage of the ground area to determine whether the structure is exempt or non-exempt?

OAR 806-010-0065(1) determines the ground area by measuring "from outside wall to outside wall and shall include the sum of the areas of all additions and the area of the original structure."

This, in combination with the square footage of any projected or suspended usable area above ground, will give you the building ground area limitation set forth in ORS 671.030(2)(c).

## 4. How do I figure the ground area footage to determine whether a building is exempt or non-exempt if the building is divided by an open walkway (breezeway), but has one continuous roof?

The common roof is over usable areas and creates the structural elements of a single building. The square footage would be the sum of the two segments of the structure and the breezeway.

## 5. If a building has a ground area greater than 4,000 square feet but does not exceed 20 feet in height (or vice versa), is it an exempt structure?

No. Both size limitations apply under the engineering and architectural laws, and a building may not exceed either the ground area limitation or the height limitation to be exempt. If only one limitation is exceeded, then the structure is not exempt and an architect or engineer would be required.

## 6. If an addition is proposed to an exempt structure, bringing the total ground area to greater than 4,000 square feet, must the plans for the addition be prepared by a registered professional?

Yes, unless the building is a single family residence or agricultural building.

The total ground area of the completed structure (the addition plus the existing building) must be considered in determining whether the building is exempt or non-exempt.

## 7. Does separation by a four-hour fire wall make one structure into two separate buildings under the architects' law, and therefore an exempt structure, if each section is less than 4,000 square feet?

No. A four-hour fire wall does not make two separate buildings under the laws governing the practice of architecture. The structure may be considered as being comprised of two separate buildings for the purposes of fire and life safety plan review if allowed under the state adopted building code. For the purposes of architects' law, as long as the building is one continuous structure, it must be considered one building and therefore subject to the size limitations.

## 8. May an unregistered individual prepare plans and specifications for interior space planning and/or remodeling of non-exempt structures?

Yes. Under ORS 671.030(2)(d), nothing in the law would prevent "a person from planning, designing, specifying or supervising the alterations or repairs to a building if: (A) the structural part of the building, including but not limited to the foundation, walls, floors, roof, footings, bearing partitions, beams, columns, and joists is not involved; (B) the building code classification by use or occupancy of the building is not changed; and (C) the building code classification by type of construction of the building is not changed."

## 9. Who may issue change orders and addenda to construction documents for non-exempt structures?

Change orders, additional drawings, and/or addenda which alter construction documents for non-exempt structures must bear the stamp and/or signature, as required, of the registered architect or engineer responsible for the modifications.

## 10. May anyone other than an architect or engineer prepare plans for submission to building officials?

Yes, but only when the building falls into the exempt status. However, even though the general public is allowed to prepare plans for submission on exempt structures, the building official has the authority to require drawings, calculations, and other related documents of an exempt structure to be prepared by a registered architect and/or engineer if the building official establishes that the work is of a highly technical nature or there is a potential risk to the life and/or safety of the structure. However, the building official can not dictate the actual design.

### Stamping:

11. If a designer or owner prepares plans for a non-exempt building and applies for a building permit, should the building official suggest that they contact an architect or engineer to have the plans and specifications reviewed and stamped?

No. Such action on the part of an architect or engineer would be contrary to the law and would put the professional's license in jeopardy. An Oregon registered professional may stamp and sign only that which was prepared under their direct control and supervision. The building official should deny the permit and advise the applicant that the plans and specifications are required to be prepared by a registered architect or engineer. The building official should also report this to OBAE and OSBEELS.

#### 12. Are wet signatures required on plans?

**Architect:** The architects' laws do not specify the type of media to be used; they only require that the original specifications and drawings intended for permit and construction be stamped and hand signed by the architect. It is common practice that the architect retains the originals that have the wet signature and will make copies for the permit and construction processes from those originals.

**Engineer:** The signature of the registrant must be wet inked; however, the seal (stamp) can be produced by a rubber stamp, embossing seal, or by a computer program. " Peel and stick" seals are not permitted. It is common practice that the engineer retains the originals that have the wet signature and will make copies for the permit and construction processes from those originals.

#### 13. May an architect prepare and stamp engineering documents?

An architect may prepare structural and building system drawings and calculations prepared under the architect's responsible control that are based on the individual's expertise. If the drawings are not done under the architect's responsible control, then the architect may not stamp them. If an engineer is involved in the project, the engineer stamps those drawings done under the engineer's responsible control.

#### 14. May an engineer prepare and stamp architectural documents?

No. The statutes define the practice of architecture and the practice of engineering. It is clear under ORS 671.020 that architectural work, as defined in ORS 671.010(6), must be done by an architect. Many times an engineer is involved in a project to do structural and building systems drawings and

calculations, and those documents, done under the control of the engineer, are what the engineer can stamp and sign on a project.

## 15. Can a set of plans be stamped by a registered professional in another state?

Architect: No. Only Oregon registered architects have the authority to practice architecture in Oregon. A person registered as an architect in another state must first obtain registration in Oregon in order to practice or solicit work in the state.

**Engineer:** No. Only Oregon registered engineers have the authority to practice engineering in Oregon. A person registered as an engineer in another state must obtain registration in Oregon in order to practice in this state, or must apply for a temporary permit per ORS 672.135.

## 16. What do the terms "Consulting Architect" and "Foreign Architect" mean and can these individuals stamp construction documents?

"Consulting Architect" is a title that may be used by those who do not have an Oregon architect registration, but do have an active architect license in another jurisdiction. "Foreign Architect" is a title that may be used by those who do not have an Oregon architect registration, but do have an active architect license in another country. Neither consulting nor foreign architects may practice architecture, sign plans, or take responsibility for projects. Consulting and foreign architects provide design input to an Oregon registered architect who takes responsibility for a project, and these titles are a way of acknowledging the individual's consultation on the project. All documents used for construction and permit purposes require the stamp and signature of an Oregon registered architect. Neither the consulting architect nor the foreign architect can stamp the construction documents.

17. Who retains the original stamped set of plans with the wet signatures? It is a common practice for the engineering or architectural firm that generated the plans to keep the original, but this is not regulated by law.

## 18. Can a professional engineer (civil, mechanical, electrical, etc.) do any design work on a significant structure?

Yes. Elements, components, etc., not part of the primary frame system, may be designed by a professional engineer who is not a structural engineer.

#### 19. Can a registered architect perform any design work on a significant structure?

Yes.

## 20. Is a professional engineering license required for the design of mechanical, sprinkler, and plumbing systems? Can an architect do this work too?

The design of mechanical, sprinkler, and plumbing systems is considered engineering. However, an architect may provide these services if they are qualified by experience and knowledge in this area of work.

## 21. If the plans are for non-exempt buildings, should they bear the stamp and signature of an Oregon registered architect or professional engineer?

All drawings and the title page of specifications for non-exempt buildings must be stamped and signed by an Oregon registered architect or professional engineer who had responsible control for the documents.

## 22. If the plans are for exempt buildings, should they bear the stamp and signature of an Oregon registered architect or professional engineer?

**Architect:** Documents for exempt structures must be stamped and signed only when prepared by an Oregon registered architect.

**Engineer:** Engineers are not required to stamp documents relating to exempt buildings under the current laws and rules.

#### 23. Can shop drawings be accepted in lieu of construction documents?

Drawings and descriptions of components or systems supplied by subcontractors or manufacturers for inclusion in the project or building are considered shop drawings. Shop drawings may not be accepted in lieu of construction documents, unless stamped by the registered architect or engineer under whose direction they were prepared. Unstamped documents may only be considered as support documents.

## 24. Do plans need to be stamped and signed when submitted for a building permit even though a plans examiner may cause changes to the documents?

Drawings submitted for plan review are considered final and ready for construction and therefore need to be stamped and signed. Drawings used only for preliminary discussions with the building department are not considered final documents and hence are to be stamped "preliminary."

## 25. May a building official/owner/builder/contractor make changes to an architect's or engineer's plans?

No. Only the engineer or architect responsible for the design may change the plans. The building official can approve submitted permit drawings that include notes of items required by code identified by the building official as "red-lines;"

however, the design professional must be made aware of those so that the original drawings can be made to reflect those requirements.

## 26. May a building official make changes to an architect's or engineer's plans when the building official has the architect's or engineer's approval?

No. The architect or engineer is responsible for the changes to his or her plans.

## 27. Can drawings of sprinkler systems be stamped by National Institute for Certification in Engineering Technologies (NICET)- certified people?

Sprinkler systems relate to life safety issues and therefore the construction drawings for sprinkler systems must be designed and stamped by an engineer or architect qualified by experience and knowledge in this area of work.

## 28. Who may make changes on the construction documents when a building permit has been obtained, the building is under construction, and the architect or engineer changes?

The OSSC requires that the building owner notify the building official when the Design Professional in Responsible Charge is changed. Under the architects' laws and rules, the original architect is required to notify OBAE and the building official if the architect is no longer retained by the owner to do construction supervision. Since the architects' laws and rules require that construction supervision must be done by an architect, then the newly retained architect is required to stamp the changes. While the engineers' laws and rules are silent on the issue of requiring the engineer to do construction supervision, any changes in design or construction documents are to be done and stamped by the appropriate design professional.

## **Other Topics:**

## 29. Is an architect required to provide supervision during the construction phase of single family residences?

No. Architects are not required to provide supervision for single family residences.

## 30. Is a professional engineer required to provide supervision during construction?

There are no laws specifically requiring engineering supervision during construction.

#### 31. When an unregistered individual prepares construction documents for a non-exempt structure, may the individual obtain a review and written certification of adequacy from an Oregon registered architect or engineer and, thereby, obtain a building permit?

No. The written certification cannot be accepted for permit issuance in lieu of construction documents which have been prepared and stamped by an Oregon registered architect or engineer (ORS 671.025).

#### **32.** May an engineer or architect bypass the plan review process? Senate Bill 711 from the 2003 Oregon Legislature created 2003 Oregon Law

Chapter 367, that states:
SECTION 4. (1) The Department of Consumer and Business Services or a municipality administering and enforcing a building inspection program under ORS 455.148 or 455.150 may not require a plan review for one and two family dwellings that are of conventional light frame construction, as defined by the department by rule, if:
(a) The plans for the dwelling are designed and stamped by a professional engineer registered under ORS 672.092 or an architect registered under ORS 671.060; and
(b) The engineer or architect is certified by the Director of the Department of Consumer and Business Services under ORS 455.720 as a one and two family dwelling plans examiner.
(2) The department or municipality is exempt from liability for any damages arising from the nonperformance of a plan review pursuant to this section.

#### 33. How do I address unprofessional work?

The complaint processes are enclosed in the following section.

## The Complaint Process

The mission of both OBAE and OSBEELS is to protect the public health, safety, and welfare by assuring that only qualified individuals are permitted to practice architecture or engineering, and that those who are licensed maintain a high standard of practice and comply with applicable statutes, rules, and regulations. Below are the processes for each regulatory board:

#### **Oregon Board of Architect Examiners (OBAE) Complaint Process**

The authority of the Board is limited to investigating and enforcing only those Oregon Laws and Administrative Rules concerned with the practice of architecture. You have the right to receive professional and qualified services from an architect. The first step is to be sure your architect is actively licensed to practice architecture in Oregon. You may do that by contacting the Architect Board office at 503-763-0662 or by clicking on its web site at www.orbae.com.

If your attempts at working the problems out with your architect fail, or if the individual you have hired is not an architect and should be, further action may be required. The Board does not have jurisdiction over fee disputes or other contractual issues or civil matters. The Board regularly addresses issues such as professional misconduct or negligence, using the "Architect" title without an Oregon registration, and/or practicing architecture without an Oregon registration.

#### 1. How do I file a complaint with OBAE?

You may contact OBAE or visit the Board's web site for a copy of the form to be used to file a complaint. You may also simply send a letter to the Board.

2. What information should I provide in completing the complaint form? When filing a complaint with OBAE, please include sufficient information for the Board to begin an investigation into the allegations. Provide as much information as possible, such as all contact information for you and the architect or designer, any contracts between the parties, the address/location of the building project, the project owner's name and contact information, the construction company name, the status of the project, the size and type of the building, building permit data, and why you believe a violation exists.

#### 3. What is the investigation process?

OBAE investigates all complaints submitted, and may ask for further information. During a formal investigation, the parties involved are contacted, and the Board obtains necessary evidence and gathers the available facts for review and analysis to determine if any rule or law violation exists. The Board

Reference Manual for Building Officials: The Architects' Law and the Engineers' Law

then determines appropriate action to take based on the circumstances of each case.

#### 4. What authority does OBAE have?

OBAE has the authority to discipline individuals and firms. This discipline includes written reprimands, suspensions, violations, and assessing penalties. However, the Board has no authority to award civil damages.

#### 5. How long does it take to resolve a complaint filed with OBAE?

It takes time to conduct a thorough investigation into the facts and allegations of each case. OBAE cannot resolve a case without a full set of facts and evidence. Each case has a separate set of facts and circumstances. The Board meets approximately seven times a year, and resolves complaints at each meeting. In addition, any disciplinary action proposed by the Board is subject to due process laws, which give any individual who disputes the facts the right to a contested case hearing before an administrative law judge.

#### Oregon State Board of Engineering Examiners and Land Surveyors (OSBEELS) Complaint Process

The authority of the Board is limited to investigating and enforcing only those Oregon Laws and Administrative Rules that apply to persons engaged in engineering and land surveying and whose conduct presents a possible danger to the public.

#### 6. How do I file a complaint with OSBEELS?

Complete, sign, and submit the OSBEELS complaint form to the Board office. To obtain a form, you may call the Board or visit www.osbeels.org.

#### 7. What information should I provide in completing the complaint form?

Complete all areas of the complaint form. In describing your complaint be sure to include:

- the work the respondent was hired to perform;
- the location of the project involved;
- the problem encountered;
- what you have done to try to resolve the problem;
- specific facts in date order;
- as much data as possible, such as plans, pictures, maps, etc.; and
- any other information that you believe will assist your case.

The more specific the information and documentation, the better the Law Enforcement Committee is able to evaluate your complaint. Completely documented complaints may actually expedite the committee's decisionmaking process by avoiding delays if additional information is required for clarification.

#### 8. Who reviews complaints received by OSBEELS?

When a complaint is sent to OSBEELS, the Board's compliance staff makes an initial determination to see if the matter appears to fall within the Board's jurisdiction. If the answer is "yes," a file is opened. At that point, it is referred to the Law Enforcement Committee for review. The committee is composed of Board members, which may include engineers, land surveyors, or public members.

#### 9. How often are the complaints reviewed?

The Law Enforcement Committee meets at least once between regular OSBEELS Meetings to prepare recommendations. Board meetings are held the second Tuesday of every odd-numbered month.

## 10. When will I know the Law Enforcement Committee's recommendation regarding my complaint?

Staff will typically acknowledge receipt of your complaint usually within 10 to 15 business days. The Law Enforcement Committee makes recommendations, based on all pertinent facts and evidence in each case, for consideration by the full OSBEELS Board at a regularly scheduled meeting. Once the Board has passed on the Committee's recommendations, you will be notified regarding the disposition of the case.

#### 11. What constitutes a violation?

OSBEELS' responsibility is to investigate complaints based upon substantiated facts relating to specific violations of the Oregon Revised Statutes and Administrative Rules. The Board has the authority to discipline its licensees and registrants for violations of the Professional Engineers Act, Professional Land Surveyors Act, and Oregon Administrative Rules, which may include:

- Negligence or incompetence;
- Deceit or misrepresentation in their professional practice;
- Fraud or deceit in obtaining their certificate;
- Misconduct or malpractice;
- Unlicensed practice or aiding and abetting unlicensed practice; and
- Any other violation of the Board's laws and regulations.

## 12. What happens if OSBEELS determines that a violation may have occurred?

An investigation is opened and a case number is assigned. If necessary, a subject matter expert is consulted to work with an investigator on the technical

Reference Manual for Building Officials: The Architects' Law and the Engineers' Law

portions of the complaint. Following the investigation, the Law Enforcement Committee will review the findings and develop a recommendation for either disciplinary action or dismissal. If disciplinary action is recommended, the respondent is offered an opportunity for a hearing and an effort to reach compliance is initiated.



## Helpful Contacts

#### Construction Contractors Board

700 Summer Street NE, #300 Salem, OR 97309 Phone: (503) 378-4621

#### Board of Geologist Examiners

1193 Royvonne Avenue SE, #24 Salem, OR 97302 Phone: (503) 566-2837

#### Landscape Architects Board

1193 Royvonne Avenue SE, #19 Salem, OR 97302 Phone: (503) 589-0093

#### Landscape Contractors Board 235 Union Street NE

Salem, OR 97301 Phone: (503) 986-6561

To locate the building official of the city or county in which you may wish a permit, visit the Building Codes web site: http://www.cbs.state.or.us/external/bcd/jurisdictions.html

## Reference Manual for Building Officials



#### OREGON BOARD OF ARCHITECT EXAMINERS (OBAE)

205 Liberty Street NE, Suite A Salem, OR 97301 Phone (503) 763-0662 Fax (503) 364-0510 Email Architectboard@orbae.com Web site www.orbae.com

#### OREGON STATE BOARD OF EXAMINERS FOR ENGINEERING AND LAND SURVEYING (OSBEELS)

728 Hawthorne Avenue NE Salem, OR 97301 Phone (503) 362-2666 Fax (503) 362-5454 Email osbeels@osbeels.org Web site www.osbeels.org

Fifth Edition, revised January 2005