

## **TITLE 24 - BUILDING REGULATIONS**

### **TABLE OF CONTENTS**

<b>Chapter 24.10</b>	<b>ADMINISTRATION AND ENFORCEMENT</b>
24.10.010	Title.
24.10.020	Purpose.
24.10.030	Scope.
24.10.040	Codes.
24.10.050	Organization.
24.10.060	Enforcement.
24.10.070	Application for Permits.
24.10.075	Bureau of Development Services Administrative Appeal Board.
24.10.080	Building Code Board of Appeal.
24.10.085	Structural Engineering Advisory Committee.
24.10.087	Alternative Technology Advisory Committee
24.10.090	Pre-application and Pre-construction Meetings.
24.10.095	Commercial and Industrial Minor Structural Labels.
24.10.100	Fees.
 <b>Chapter 24.15</b>	 <b>DEFINITIONS</b>
24.15.010	General.
24.15.020	Abandoned Structure.
24.15.030	Agreement/Contract to Repair Work.
24.15.040	Approved Testing Agency.
24.15.045	Boarded.
24.15.050	Building.
24.15.060	Dangerous Structure.
24.15.065	Derelict Commercial Building.
24.15.070	Director.
24.15.075	Dwelling Unit.
24.15.080	Exterior Property Area.
24.15.090	Hearings Officer.
24.15.100	Imminently Dangerous.
24.15.110	Inspections Manager.
24.15.115	Master Permit/Facilities Permit Program
24.15.120	Owner.
24.15.130	Repair.
24.15.140	Residential Structure.
24.15.150	Requested Inspection.
24.15.160	Service Station Site.
24.15.170	Substandard.
24.15.180	Special Inspector.
24.15.190	Subject Structure.
24.15.200	Structure.
24.15.215	Tree Removal.

24.15.220	Unoccupied.
24.15.230	Unsafe.
24.15.240	Unsecured.
24.15.250	Value/Valuation.
24.15.260	Warehousing.
<b>Chapter 24.20</b>	<b>SPECIAL INSPECTIONS</b>
24.20.010	General.
24.20.020	Selection of the Special Inspectors and/or Agencies.
24.20.030	General Duties of the Special Inspector.
<b>Chapter 24.25</b>	<b>MOVING OF BUILDINGS</b>
24.25.010	General.
24.25.020	Permit Information Required.
24.25.030	Direction of City Engineer.
24.25.040	Housing Code Inspection Report Required.
<b>Chapter 24.30</b>	<b>HOME OCCUPATIONS</b>
24.30.010	Permits Required.
24.30.020	Compliance with Planning and Zoning Regulations.
24.30.030	Fees for Home Occupations.
<b>Chapter 24.40</b>	<b>USE OF AND PROJECTIONS OVER PUBLIC STREETS AND PROPERTY</b>
24.40.010	Street Use.
24.40.020	Dirt on Streets from Construction Projects.
24.40.030	Fees.
<b>Chapter 24.45</b>	<b>PARKING AND DRIVEWAY SURFACES</b>
24.45.010	General.
24.45.020	Minimum Surfacing Standards for Parking Areas and Garages for Passenger Cars and Trucks not Exceeding 1/2-Ton Capacity and Driveways Serving Structure 150 Feet or Less from an Improved Public Right-of-Way.
24.45.030	Minimum Surfacing Standards for Driveways Serving Structures More than 150 Feet from an Improved Public Right-of-Way.
24.45.040	Minimum Surfacing Standards for Trucks Over 1/2-Ton Capacity and Other Vehicles.
24.45.050	Private Streets.
<b>Chapter 24.50</b>	<b>FLOOD HAZARD AREAS</b>
24.50.010	Purpose.
24.50.020	General.
24.50.030	Flood Related Definitions.
24.50.040	FIA Study and Flood Hazard Maps.
24.50.050	Flood Hazard Areas and Flood Protection Elevations.
24.50.060	Provisions for Flood Hazard Reduction.

24.50.065	Recreational Vehicles located in Areas of Special Flood Hazard or Base Flood Zones.
24.50.070	Appeals and Variances.
<b>Chapter 24.51</b>	<b>WILDFIRE HAZARD ZONES</b>
24.51.010	Purpose.
24.51.020	Definitions.
24.51.030	Wildfire Hazard Zone Map Adoption.
24.51.040	Map Revision Process.
24.51.050	Appeals of Decisions Made by the Chief.
24.51.060	General.
<b>Chapter 24.55</b>	<b>BUILDING DEMOLITION</b>
24.55.100	Demolition - Debris - Barricades - Nuisances.
24.55.150	Definitions.
24.55.200	Residential Demolition Delay - Housing Preservation.
24.55.205	Site Control Measures in Residential Demolitions.
24.55.210	Major Residential Alterations and Additions.
<b>Chapter 24.60</b>	<b>FENCES</b>
24.60.020	Barbed Wire Fencing.
<b>Chapter 24.65</b>	<b>SIDEWALK VAULT OPENINGS</b>
24.65.010	Location of Sidewalk Vault Openings.
24.65.020	Number of Sidewalk Vault Openings.
24.65.030	Sidewalk Elevators.
24.65.040	Operation of Sidewalk Elevators.
24.65.050	Plans Required.
<b>Chapter 24.70</b>	<b>CLEARING, GRADING, AND RETAINING WALLS</b>
24.70.010	General.
24.70.020	Permits.
24.70.030	Hazards.
24.70.040	Special Definitions.
24.70.050	Information on Plans and in Specifications.
24.70.060	Bonds.
24.70.070	Cuts.
24.70.080	Fills.
24.70.085	Retaining Walls.
24.70.090	Setbacks.
24.70.100	Drainage and Terracing.
24.70.120	Grading Inspection.
24.70.130	Completion of Work.
<b>Chapter 24.75</b>	<b>UNIFORM BUILDING ADDRESS SYSTEM</b>
24.75.010	Uniform System.

24.75.020	Size and Location of Building Numbers.
24.75.030	Administration.
24.75.040	Owner Responsibility.
24.75.050	Alteration of Building Number - Improper Number.
24.75.060	Building Defined.
24.75.070	Enforcement.

## **Chapter 24.85**

## **SEISMIC DESIGN REQUIREMENTS FOR BUILDINGS**

24.85.010	Scope.
24.85.015	Structural Design Meeting.
24.85.020	Seismic Related Definitions.
24.85.030	Seismic Improvement Standards.
24.85.040	Change of Occupancy or Use.
24.85.050	Building Additions or Structural Alterations.
24.85.051	Mezzanine Additions.
24.85.055	Structural Systems Damaged by Catastrophic Events.
24.85.056	Structural Systems Damaged by an Earthquake.
24.85.060	Required Seismic Evaluation
24.85.065	Seismic Strengthening of Unreinforced Masonry Bearing Wall Buildings.
24.85.067	Voluntary Seismic Strengthening.
24.85.070	Phasing of Improvements.
24.85.075	Egress Through Existing Buildings.
24.85.080	Application of Other Requirements.
24.85.090	Fee Reductions.
24.85.095	Appeals.

## **Chapter 24.90**

## **MANUFACTURED DWELLING INSTALLATION AND ACCESSORY STRUCTURES, MANUFACTURED DWELLING PARKS, RECREATION PARKS, RECREATIONAL PARK TRAILER INSTALLATION AND ACCESSORY STRUCTURES**

24.90.010	Purpose.
24.90.020	Scope.
24.90.030	Adoption of Codes and Regulatory Authority.
24.90.040	Definitions.
24.90.050	Administration and Enforcement.
24.90.060	Special Regulation.
24.90.070	Permit Application.
24.90.080	Violations.
24.90.090	Appeals.

# **TITLE 24 - BUILDING REGULATIONS**

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.10 - ADMINISTRATION AND ENFORCEMENT**

##### **Sections:**

24.10.010	Title.
24.10.020	Purpose.
24.10.030	Scope.
24.10.040	Codes.
24.10.050	Organization.
24.10.060	Enforcement.
24.10.070	Application for Permits.
24.10.075	Bureau of Development Services Administrative Appeal Board.
24.10.080	Building Code Board of Appeal.
24.10.085	Structural Engineering Advisory Committee.
24.10.087	Alternative Technology Advisory Committee
24.10.090	Pre-application and Pre-construction Meetings.
24.10.095	Commercial and Industrial Minor Structural Labels.
24.10.100	Fees.

##### **24.10.010 Title.**

This Title shall be known as the “Building Regulations,” and may be so cited and pleaded and is referred to herein as “this Title.”

##### **24.10.020 Purpose.**

(Amended by Ordinance Nos. 163908 and 187432, effective December 4, 2015.) The purpose of this Title is to provide minimum performance standards to safeguard the health, safety, welfare, comfort, and security of occupants and users of buildings and structures within the City, and will provide for the use of modern methods, devices, materials, techniques, and practicable maximum energy conservation by regulating and controlling the design, construction, quality of materials, use, and occupancy, location and maintenance of all buildings, structures and land within this jurisdiction.

##### **24.10.030 Scope.**

(Amended by Ordinance Nos. 163237, 163908, 165678 and 176783, effective August 30, 2002.) The provisions of this Title shall apply to the construction, alteration, moving, demolition, repair, and use of any building, structure or land, and to any land clearing or grading within the City. Exceptions are work in the public right-of-way as approved by the City Engineer; publicly constructed sanitary and storm sewer systems and facilities approved by the BES Chief Engineer; and public utility towers and poles, mechanical equipment not specifically regulated in this Code.

##### **24.10.040 Codes.**

(Amended by Ordinance Nos. 158651, 162695, 163908, 164950, 166111, 166436, 169312, 169905, 172737, 174891, 177414, 177433, 178745, 179125, 181359, 182370, 184140, 185545, 185798, 186932 and 188781, effective January 24, 2018.)

**TITLE 24**  
**BUILDING REGULATIONS**

- A.** Structural Specialty Code. The provisions of the State of Oregon Structural Specialty Code 2014 Edition, as published by the International Code Council and known as the International Building Code 2012 Edition and amended by the Building Codes Division of the Oregon Department of Consumer and Business Services are hereby adopted by reference. The Structural Specialty Code is on file in the Development Services Center of the City of Portland.
- B.** Compliance with recognized standards. Where requirements of this Title do not provide necessary regulation or are not fully detailed with regard to processes, methods, specifications, equipment testing, and maintenance, standards of design, performance, and installation, and other pertinent criteria, the applicable standards and recommendation of the National Fire Protection Association, as set forth in its National Fire Code shall apply, a copy of which is on file in the City Auditor's Office. Said volumes and all subsequent editions are hereby incorporated in this Title by reference.
- C.** Application of other titles. Nothing in this Title is intended to permit the establishment or conversion of any structure or use of any land in any zone which is not in accordance with the applicable sections of Title 25 (Plumbing Regulations), Title 26 (Electrical Regulations), Title 27 (Heating and Ventilating Regulations), Title 33 (Planning and Zoning Regulations).
- D.** Residential code. The provisions of the State of Oregon, Residential Specialty Code, 2017 Edition, as published by the International Code Council, and known as the International Residential Code, 2015 Edition, and amended by the Building Codes Division of the Oregon Department of Consumer and Business Services, including the appendices and standards adopted by the State of Oregon, is hereby adopted by reference. The Residential Specialty Code is on file in the Development Services Center of the City of Portland.
- E.** Energy Efficiency Specialty Code. The provisions of the State of Oregon Energy Efficiency Specialty Code 2014 Edition, as published by the International Code Council and known as the International Energy Conservation Code, 2009 Edition and amended by the Building Codes Division of the Oregon Department of Consumer and Business Services, are hereby adopted by reference. The Energy Efficiency Specialty Code is on file in the Development Services Center of the City of Portland.

**24.10.050      Organization.**

(Amended by Ordinance Nos. 176955 and 188647, effective November 17, 2017.)

- A.** Bureau of Development Services. The Bureau of Development Services shall be under the jurisdiction of the Director designated by the appointing authority.

## **TITLE 24**

### **BUILDING REGULATIONS**

- B.** Director to enforce Title. General. The Director is hereby authorized and directed to enforce all provisions of this Title. For such purpose the Director shall have the powers of a law enforcement officer.
- C.** Deputies. The Director may appoint officers, inspectors, and assistants and other employees. The Director may also deputize employees as may be necessary to carry out the duties of the Bureau of Development Services.
- D.** Right of Entry. Whenever an inspection is necessary to enforce any of the provisions of this Title, or whenever the Director or the Director's duly authorized representative has reasonable cause to believe that there exists in any building or upon any premises any condition which makes such building or premises substandard as defined within this Title, or upon presentation of a lawfully issued warrant, the Director may enter such building or premises at all reasonable times to inspect or to perform any imposed duty and shall have recourse to every remedy provided by law to secure entry.

#### **24.10.060 Enforcement.**

(Amended by Ordinance Nos. 168340, 176955, 187432 and 188647, effective November 17, 2017.)

- A.** All permitted work shall be subject to inspection by the Director, and certain work shall have continuous inspection by special inspectors as specified in Section 24.20.
- B.** The Director, upon notification from the permit holder or his agent, shall either approve of those portions of the construction requiring inspection or shall notify the permit holder, or the permit holder's agent, in writing, wherein the same fails to comply with the provisions of this Title.
- C.** Stop Work Orders. When it is necessary to obtain compliance with this Title, the Director may issue a stop work order requiring that all work, except work directly related to elimination of the violation, be immediately and completely stopped. If the Director issues a stop work order, activity subject to the order may not be resumed until such time as the Director gives specific approval in writing. The stop work order will be in writing, except when an emergency condition exists, the Director may issue a stop work order orally, followed by a written stop work order. All stop work orders will conform to the requirements of City Code Section 3.30.080. Any person subject to a stop work order may seek review of the order by the Director and may appeal the Director's determination in accordance with City Code Section 3.30.080.
- D.** It is unlawful for any person, firm, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, or maintain any building or structure in the City, or cause the same to be done, contrary to or in violation of any of the provisions of this Title.

**TITLE 24**  
**BUILDING REGULATIONS**

- E.** If an unoccupied structure or structure under construction is open or unattended, the Director may enter to determine if a hazardous condition exists. If such a condition exists, the Director shall notify the owner of the condition and order the structure immediately secured against the entry of unauthorized persons.
- F.** In the event the property owner, permit holder or the owner's agent fails or neglects to carry out any requirement, or fails to correct any noted violation of this Title, the Director may gain compliance by any of the remedies outlined in Chapter 3.30 of the Code of the City of Portland.

**24.10.070 Application for Permits.**

(Amended by Ordinance. Nos. 162100, 163908, 165678, 169905, 171773, 174880, 176783, 176955, 180330, 187432, 188647 and 188884, effective April 4, 2018.)

- A.** Permits required. No person, firm, or corporation shall erect, construct, enlarge, alter, repair, move, improve, remove, convert, change occupancy group of, or demolish any building or structure, or to do any clearing or grading, or cause any of the same to be done without first obtaining a building permit, or where appropriate a minor structural label as outlined in Section 24.10.095. The limitations of Oregon Revised Statutes 455.020 notwithstanding, permits are required to construct, alter, repair or move any structure as identified in this Title or in the Oregon Structural Specialty Code or the Oregon Residential Specialty Code, as adopted in Chapter 24.10 of this Title. Building permits and fees for work on private property are waived whenever the work appears on plans and specifications, approved by the City Engineer or BES Chief Engineer. This work shall be limited to the construction of streets, public sewers, public stormwater management facilities, driveways, retaining walls, fences, walkways, parking pads, steps, and tree, shrub, and brush removal.
- B.** Plans and specifications. Plans, engineering diagrams, and other data shall be submitted in three sets with each application, and shall comply with the requirements of Chapter 1 of the Structural Specialty Code. If a structural design is required, computations, stress diagrams, computer data, and such additional data as required by the Director, sufficient to show the correctness of the plans and compliance with the structural provisions of this Title shall be submitted. The above data shall include a brief summary of all basic assumptions, design methods, structural systems, loading, lateral bracing systems, and a table of contents of the computations. Computer calculations submitted as substantiation of the design shall include a copy of the program users manual for each program, definition, sketches, index of data runs, and properly identified input and output listings. For other than nationally recognized programs, the correctness of the program shall be substantiated in a manner acceptable to the Director. When required by the Director, or when required under ORS 672 (State Engineering Law) or ORS 671 (State Architectural Law), plans shall be prepared and certified by an architect or registered professional engineer licensed to practice in the State of Oregon.

## **TITLE 24**

### **BUILDING REGULATIONS**

- C.** Parking lots. Parking lots shall not require a separate building permit when they are clearly shown on plans submitted and their valuation is included on the application for the principal building permit.
- D.** Compliance with Chapter 17.88 (Street Access) of this Code is required prior to issuance of this permit.
- E.** Plans for other than one and two family dwelling repairs, remodels, or additions shall be approved by the Fire Marshal prior to approval by the Director.
- F.** Issuance of permits. Issuance of permits shall be in accordance with Chapter 1 of the Structural Specialty Code provided that plans for all commercial buildings and any off-street parking area where the parking of three or more cars is to be established shall be approved by the City Engineer and the City Traffic Engineer before a building permit may be issued.
- G.** Charge for partial permits. When complete plans and specifications are not available, the Director may issue partial permits to assist in the commencement of the work, provided that a partial permit charge is paid to the bureau. The number of partial permits issued shall not exceed six on any individual project, except that in special circumstances the Director may allow this number to be exceeded.
- H.** Retention of plans.
  - 1.** Plans and specifications for all buildings, or their photographic image, shall be retained permanently in the files of the Bureau of Development Services as follows:
    - a.** Plans and specifications for work which does not concern or affect the structural stability of a building and which does not affect a change of occupancy may be destroyed after 5 years from date of building permit for same;
  - 2.** Plans and specifications for one or two family dwellings, and/or buildings accessory thereto may be destroyed after 5 years from date of building permit for same.
- I.** A separate permit, known as a development permit, shall be required for a site development, changes in use, or other work performed in compliance with Title 33, Chapter 33.700, Administration, which is not otherwise included with the permit described in Subsection A. of this Section. Reviews and approval of site plans or other documents shall be obtained from the Bureau of Development Services prior to issuance of the permit.

**TITLE 24**  
**BUILDING REGULATIONS**

- J.** Life of Permit Limited. If no inspection approval has taken place within six months after permit issuance, the permit shall become void, and no further work shall be done at the premises until a new permit has been secured and a new fee paid. Each time an inspection approval is granted, the permit shall be deemed to be automatically extended for six months, until final approval is granted. The Building Official may extend a permit for one period of six months upon finding that the permittee was unable to commence or continue work for reasons beyond the permittee's control. Extension requests shall be in writing and shall be received by the Director before the permit expiration date. If an inspection approval has not been granted within this extended time period, the permit shall be void. A permit that has been expired for six months or less may be renewed provided no changes have been made in the original plans and specifications for such work. No permit may be renewed if it has been expired for more than six months. A permit may be renewed only once. If an inspection approval has not been granted within the time period of permit renewal the permit shall be void. The renewal fee shall be one half the amount required for a new building permit.
- K.** Maintenance Agreements. If any building element, structure, or utility crosses a real property line, a maintenance agreement and access easement must be signed by all affected property owners and recorded in the County Recorder's Office on all affected properties. The agreement and easement must address the repair, upkeep, and replacement of and access to all elements, structures, and utilities that cross a real property line. Prior to recording, the maintenance agreement and access easement must be reviewed and approved by the building official. The maintenance agreement and access easement may not be modified or suspended without the building official's prior written approval. The applicant must provide a copy of the recorded maintenance agreement and access easement to the building official prior to issuance of the building permit.

**24.10.075 Bureau of Development Services Administrative Appeal Board.**

(Added by Ordinance No. 187432, effective December 4, 2015.)

- A. Appointment of Administrative Appeal Board.** The Bureau of Development Services Administrative Appeal Board consists of the Building Official and Bureau staff members appointed by the Director. In appointing staff members, the Director will consider the issues presented by the appeal and what particular expertise will be helpful in addressing those issues. The staff will act in an advisory capacity to the Building Official. The Administrative Appeal Board may:
- 1.** review appeals of the Bureau's application and interpretation of this Title and the State of Oregon specialty codes adopted in this Title (collectively referred to as the "Building Code");
  - 2.** review requests for modifications to the strict application of the Building Code; and

## TITLE 24

### BUILDING REGULATIONS

3. review requests to use alternative materials, design or methods of construction and equipment.

**B. Appeals to the Administrative Appeal Board and Final Decisions.** Any person aggrieved by a decision of the Bureau related to the application and interpretation of the Building Code or this Title or who wants to request a modification to the strict interpretation of the Building Code or consideration of an alternative material, design or method of construction or equipment may file an appeal with the Administrative Appeal Board. Such an appeal must be filed within 180 days of the Bureau decision being appealed; provided, however, the Building Code in effect at the time the Bureau decision was made shall be applied to the administrative appeal. The Administrative Appeal Board may:

1. grant an appeal if the Administrative Appeal Board finds that the Building Code was not correctly interpreted or applied;
2. grant a modification to the application of the Building Code where special individual reasons make application of the strict letter of the Building Code impractical, the modification is in compliance with the intent and purpose of the Building Code, and such modification does not lessen health, accessibility, life and fire safety or structural requirements of the structure; or
3. approve an alternative material, design or method of construction and equipment if the Administrative Appeal Board finds that any such alternative complies with the intent of the Building Code and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the Building Code in quality, strength, effectiveness, fire resistance, durability, accessibility and safety. The Administrative Appeal Board may not waive the requirements of the Building Code. The Administrative Appeal Board review will culminate in a final decision by the Building Official. The Administrative Appeal Board meeting is not open to attendance by the appellant or the public. The Bureau will provide final decisions to the appellant by publication of the decision on the Bureau's website within 10 calendar days of the hearing, provided the Bureau has received all required information from the applicant.

**C. Reconsideration of Final Decisions and Appeals to the Building Code Board of Appeal.** Any person aggrieved by a final decision of the Building Official made under Subsection B. above may either file a reconsideration of that decision within 180 days of the decision based on new or revised information or appeal the decision to the Building Code Board of Appeal in accordance with Section 24.10.080 within 90 days of the final decision being appealed. There is no additional fee for the first reconsideration of an Administrative Appeal Board decision or for an appeal to the Building Code Board of Appeal. The Building Code in effect at the time of the

**TITLE 24**  
**BUILDING REGULATIONS**

final decision being reconsidered or appealed will be applied to the reconsideration or subsequent appeal to the Building Code Board of Appeal.

- D. Fees for Appeals.** The fees for administrative appeals shall be as stated in the Fee Schedule adopted by the City Council. The current approved Fee Schedule is available at the Development Services Center and on the Bureau's website.

**24.10.080 Building Code Board of Appeal.**

(Replaced by Ordinance No. 187432, effective December 4, 2015.)

- A. Appointment of Building Code Board of Appeal.** In order to hear appeals of final decisions of the Building Official made under Section 24.10.075, there has been created a Building Code Board of Appeal, consisting of three members and three alternates appointed by the Mayor and approved by the City Council.

1. Each member and alternate member must be qualified by experience and training to make decisions pertaining to the Building Code and building construction. At least one member and one alternate member must be competent builders who have engaged in the construction business in the City for at least 2 years immediately preceding their appointments, and at least one member and one alternate member shall be competent architects who have practiced their profession for at least 3 years.
2. Building Code Board of Appeal appointments shall be for 3-year terms. Appeal Board members may serve no more than two complete 3-year terms, unless the Director recommends approval of a longer term, and the Mayor and City Council approve the extended appointment. Vacancies occurring prior to the end of a term for whatever cause may be filled by qualified persons through appointment by the Mayor for the remainder of the term.
3. Any member may be removed by the Mayor for incompetence, dereliction of duty, incapacity or other sufficient cause.
4. Members of the Building Code Appeal Board shall comply with the State ethics laws applicable to public officials.
5. Members of the Building Code Appeal Board shall serve in a voluntary capacity and without pay.

- B. Appeals to the Building Code Appeal Board.** The Building Code Board of Appeal may review Administrative Appeal Board decisions or any other final decision of the Building Official or Director related to the application and interpretation of this Title or the Building Code. The Building Code appeal will be limited to the facts and record reviewed by the Administrative Appeal Board, Building Official or Director related to the decision being appealed. A hearing will

## **TITLE 24**

### **BUILDING REGULATIONS**

be held within 45 days after an interested party submits a written appeal to the Building Code Board of Appeal. A panel of three Building Code Appeal Board members will hear each appeal. The Board may, by a majority vote, affirm, annul, or modify the decision.

**C. Powers and Limitations of Authority of the Building Code Appeal Board.** The Building Code Board of Appeal may provide reasonable interpretations of the requirements of the Building Code and may grant an appeal if the Board finds one of the following:

1. the Building Official or Director did not correctly apply or interpret this Title or the Building Code;
2. special individual reasons make application of the strict letter of the Building Code impractical, the modification is in compliance with the intent and purpose of the Building Code, and such modification does not lessen health, accessibility, life and fire safety or structural requirements of the structure; or
3. any alternative material, design or method of construction and equipment complies with the intent of the Building Code and the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the Building Code in quality, strength, effectiveness, fire resistance, durability, accessibility and safety. The Building Code Board of Appeal may not waive the requirements of the Building Code.

Any person aggrieved by a final decision of the Building Code Board of Appeal may, within 30 days after the date of the decision, appeal to the appropriate advisory board of the State of Oregon Department of Consumer and Business Services.

#### **24.10.085 Structural Engineering Advisory Committee.**

(Added by Ordinance No. 162056; amended by Ordinance Nos. 187432 and 188647, effective November 17, 2017.)

**A.** There is hereby created a Structural Engineering Advisory Committee consisting of six members licensed in Oregon to practice structural engineering, appointed by the Mayor and approved by the City Council.

Members may be appointed to no more than two consecutive 3-year terms, unless the Director recommends approval of a longer term, and the Mayor and City Council approve the extended appointment. In addition, the Director, or designee, shall be an ex-officio member of the board.

**B.** Any member of the board may be removed from office by the Mayor for malfeasance in office or neglect of duty at any time during the member's tenure.

**TITLE 24**  
**BUILDING REGULATIONS**

- C.** The committee shall elect a chairperson, adopt rules of procedure, and set the time and place for regular meetings. A quorum consisting of at least three members of the committee is required to conduct committee business. Written minutes of all meetings shall be made and kept subject to the requirements and limitations of ORS 192.610 to ORS 192.690.
- D.** It shall be the duty of the board to advise the Director and/or the Appeals Board in structural matters relative to reasonable interpretation and to alternate materials and methods of construction.
- E.** Any action of the board shall be in an advisory capacity to the City. Subsequent action taken by the City as a result of advice from the boards shall be the sole responsibility of the City.

**24.10.087 Alternative Technology Advisory Committee.**

(Added by Ordinance No. 182217; amended by Ordinance No. 187432, effective December 4, 2015.)

- A. Purpose.** It shall be the duty of the Alternative Technology Advisory Committee to advise the Bureau of Development Services on new or innovative sustainable building technologies and products.
- B. Membership.** The Alternative Technology Advisory Committee shall consist of a minimum of three and a maximum of seven members. The committee members will be appointed by the Mayor and approved by the City Council. The committee shall consist of design professionals, construction contractors, and persons associated with a university with an engineering school. In addition, two designees from the Bureau of Development Services familiar with building code review shall be ex-officio members of the committee.
- C. Appointment and Terms.**

  - 1.** Appointment to the Alternative Technology Advisory Committee shall be for a three-year term. Committee members may be appointed to no more than two consecutive, complete terms, unless the Director recommends approval of a longer term, and the Mayor and City Council approve the extended appointment. If a position is vacated during a term, it shall be filled for the unexpired term.
  - 2.** Any member of the committee may be removed from the committee by the Mayor for malfeasance in office.
  - 3.** The committee shall elect a chairperson, adopt rules of procedure, and set the time and place for regular meetings. Written minutes of all meetings shall be kept.

## **TITLE 24**

### **BUILDING REGULATIONS**

- D. Compensation.** Alternative Technology Advisory Committee members shall serve without compensation.
- E. Other.** The Alternative Technology Advisory Committee serves only in an advisory capacity to the City. Subsequent action taken by the City as a result of the committee's advice shall be the sole responsibility of the City.

#### **24.10.090 Pre-application and Pre-construction Meetings.**

(Amended by Ordinance No. 162100, effective August 1, 1989). Where major construction projects involve coordination between City bureaus and the design/construction teams, the Director may hold a pre-application or pre-construction meeting with representatives of the interested parties as an aid to the enforcement of this Title.

#### **24.10.095 Commercial and Industrial Minor Structural Labels.**

(Added by Ordinance No. 171773; amended by Ordinance No. 187432, effective December 4, 2015.)

- A. General.** Oregon Revised Statutes Chapter 455.155 gives the Department of Consumer and Business Services the authority to create a statewide permit and inspection system for minor construction work. The Oregon Building Codes Division under the Department of Consumer and Business Services has created a mandatory statewide minor labels program. Implementation rules are found in Oregon Administrative Rules 918-100-0000 through 918-100-0600. The Bureau, in accordance with OAR 918-100-0060, will conduct inspections and issue necessary correction notices for minor commercial and industrial labels issued pursuant to the statewide minor labels program.

#### **24.10.100 Fees.**

##### **24.10.101 General.**

(Amended by Ordinance No. 176955, effective October 9, 2002.) The following fees are required to be paid to the Director of the Bureau of Development Services, shall be as set forth in this Chapter.

##### **24.10.102 Building Permit and Plan Check/Process Fee.**

(Replaced by Ordinance No. 174719, effective August 21, 2000.)

- A.** All required fees are stated in the Fee Schedule adopted by City Council. Fees will be updated annually or on an as needed basis. The approved Fee Schedule will be available at the Development Services Center.
- B.** A plan checking fee is payable when the plans and application are accepted by the Director for examination and shall not be refundable. A permit fee shall be paid to the Director before a building permit is issued.

**TITLE 24**  
**BUILDING REGULATIONS**

- C. Permit and plan check fees will, as a general rule, be refunded when the services covered by the fee have not commenced, and the permit or plan review fees were paid incorrectly due to an error on the part of the City. When a permit applicant requests a refund, but the City was not at fault in accepting payment, fees shall be retained to cover the cost of plan review or inspections actually performed and 20 percent of the amount remaining. State surcharge fees are only refundable when a permit was issued in error. Requests for refunds must be made within 6 months of payment or permit issuance, whichever is later. Refunds are to be made to the same person or firm who paid the fee within 3 months of the request. Exceptions to the above requirements may be made by the Director or designee.

**24.10.103 Requested Inspection Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.104 Fee for Appeal.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.106 Home Occupation Permit.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.107 Appeal Fee for Historical Building Review Board.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.108 Street Use Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.109 Grading Permit Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.110 Excavation and Grading Plan Check Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.111 Dangerous Building Abatement Processing Fee.**

(Repealed by Ordinance No. 167088, effective Dec. 3, 1993.)

**24.10.112 Product Approval Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.113 Circus Tent Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.114 Welder Certification Fee.**

(Repealed by Ordinance No. 165486, effective July 1, 1992.)

**24.10.115 Reproduction Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

## **TITLE 24**

### **BUILDING REGULATIONS**

**24.10.116 Fee for Examination of Filed Plans.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.117 Approved Fabricators Certification Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.118 Special Inspection Certification Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.119 Approved Testing Agency Certification Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.122 Certificate of Occupancy.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.123 Temporary Certificate of Occupancy.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.124 Zoning Inspection Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.125 Inspections Outside of Normal Business Hours.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.126 Reinspection Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.127 Additional Plan Review Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.128 Address Assignment Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.130 Clearing Permit Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.131 Clearing With Tree Cutting Permit Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.).

**24.10.132 Pre-Permit Site Inspection for Properties in Environmental Zones.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.133 Manufactured Dwelling Installation Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**TITLE 24**  
**BUILDING REGULATIONS**

**24.10.134      Manufactured Dwelling Park.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.135      Recreational Park.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.136      Park Trailer Installation Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.137      Minor Structural Labels.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.138      Master Permit/Facilities Permit Program Fees.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.139      On-site Permanent Stormwater Control Facilities Inspection Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

**24.10.140      Tree Preservation and Planting Plan Check and Inspection Fee.**

(Repealed by Ordinance No. 174719, effective August 21, 2000.)

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.15 - DEFINITIONS**

##### **Sections:**

24.15.010	General.
24.15.020	Abandoned Structure.
24.15.030	Agreement/Contract to Repair Work.
24.15.040	Approved Testing Agency.
24.15.045	Boarded.
24.15.050	Building.
24.15.060	Dangerous Structure.
24.15.065	Derelict Commercial Building.
24.15.070	Director.
24.15.075	Dwelling Unit.
24.15.080	Exterior Property Area.
24.15.090	Hearings Officer.
24.15.100	Imminently Dangerous.
24.15.110	Inspections Manager.
24.15.115	Master Permit/Facilities Permit Program
24.15.120	Owner.
24.15.130	Repair.
24.15.140	Residential Structure.
24.15.150	Requested Inspection.
24.15.160	Service Station Site.
24.15.170	Substandard.
24.15.180	Special Inspector.
24.15.190	Subject Structure.
24.15.200	Structure.
24.15.215	Tree Removal.
24.15.220	Unoccupied.
24.15.230	Unsafe.
24.15.240	Unsecured.
24.15.250	Value/Valuation.
24.15.260	Warehousing.

##### **24.15.010 General.**

For the purpose of this Title, certain terms, phrases, words, and their derivatives shall be construed as specified herein. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine. Terms, words, phrases, and their derivatives used, but not specifically defined in this Chapter, either shall have the meaning defined in this Title, or if not herein defined, shall have the meanings commonly accepted in the community.

**24.15.020      Abandoned Structure.**

An abandoned structure is a structure that has been vacant for a period in excess of 6 months or any period less than 6 months when a vacant structure or portion thereof constitutes an attractive nuisance or hazard to the public.

**24.15.030      Agreement/Contract to Repair/Work.**

An agreement or contract to repair/work is a written agreement in which an owner of a structure agrees to carry out repair/work on any abandoned, unsafe, dangerous structure, or structure between a specified commencement and completion date.

**24.15.040      Approved Testing Agency.**

An approved testing agency is an established and recognized agency regularly engaged in conducting testing and furnishing inspection services.

**24.15.045      Boarded.**

Added by Ordinance No. 162525; amended by 164318 and 168901, effective June 7, 1995.) Secured against entry by apparatus which is visible off the premises and is not both lawful and customary to install on occupied structures.

**24.15.050      Building.**

A building is a structure used or intended for sheltering any use or occupancy.

**24.15.060      Dangerous Structure.**

(Amended by Ordinance No. 168626, effective April 22, 1995.) Any structure which has any or all of the conditions or defects hereinafter described, to the extent that life, health, property, or safety of the public or its occupants are endangered, shall be deemed to be a dangerous structure and such condition or defects shall be abated pursuant to Sections 24.55.250 and 24.55.300 of this Chapter.

- A. Whenever the stress in any materials, member, or portion thereof, due to all dead and live loads, is more than 1-1/2 times the working stress or stresses allowed in the Oregon Structural Specialty Code and Fire and Life Safety Code for new buildings of similar structure, purpose, or location.
- B. Whenever any portion thereof has been damaged by fire, earthquake, wind, flood, or by any other cause, to such an extent that the structural strength or stability thereof is materially less than it was before such catastrophe and is less than the minimum requirements of the Oregon State Structural Specialty Code and Fire and Life Safety Code for new buildings of similar structure, purpose, or location.
- C. Whenever any portion or member of appurtenance thereof is likely to fail, or to become detached or dislodged, or to collapse and thereby injure persons or damage property.

**TITLE 24**  
**BUILDING REGULATIONS**

- D.** Whenever any portion of a building, or any member, appurtenance, or ornamentation of the exterior thereof is not of sufficient strength or stability, or is not so anchored, attached or fastened in place so as to be capable of resisting a wind pressure of one-half of that specified in the Oregon Structural Specialty Code and Fire and Life Safety Code for new buildings of similar structures, purpose, or location without exceeding the working stresses permitted in the Oregon State Structural Specialty Code and Fire and Life Safety Code for such buildings.
- E.** Whenever any portion thereof has wrecked, warped, buckled, or settled to such an extent that walls or other structural portions have materially less resistance to winds or earthquakes than is required in the case of similar new construction.
- F.** Whenever the building or structure, or any portion thereof, because of

  - 1. dilapidation, deterioration, or decay;
  - 2. faulty construction;
  - 3. the removal, movement, or instability of any portion of the ground necessary for the purpose of supporting such building;
  - 4. the deterioration, decay, or inadequacy of its foundation; or
  - 5. any other cause, is likely to partially or completely collapse.
- G.** Whenever, for any reason, the building or structure, or any portion thereof, is manifestly unsafe for the purpose for which it is being used.
- H.** Whenever the exterior walls or other vertical structural members list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one-third of the base.
- I.** Whenever the building or structure exclusive of the foundation, shows 33 percent or more damage or deterioration of its supporting member or members, or 50 percent damage or deterioration of its non-supporting members, enclosing, or outside wall coverings.
- J.** Whenever the building or structure has been so damaged by fire, wind, earthquake or flood or any other cause, or has become so dilapidated or deteriorated as to become (i) an attractive nuisance, or (ii) a harbor for vagrants or criminals.
- K.** Whenever any building or structure has been constructed, exists, or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the building regulations of this City, as specified in the Oregon State Structural Specialty Code and Fire and Life Safety Code or any law

**TITLE 24**  
**BUILDING REGULATIONS**

or ordinance of this State or City relating to the condition, location, or structure or buildings.

- L.** Whenever any building or structure which, whether or not erected in accordance with all applicable laws and ordinances, has in any non-supporting part, member, or portion, less than 50 percent, or in any supporting part, member, or portion less than 66 percent of the
  - 1.** strength,
  - 2.** fire-resisting qualities or characteristics required by law in the case of a newly constructed building of like area, height, and occupancy in the same location. This subsection does not apply to strength required to resist seismic loads. For application of seismic requirements see Chapter 24.85.
- M.** Whenever any building or structure, because of dilapidated condition, deterioration, damage, inadequate exits, lack of sufficient fire-resistive construction, faulty electric wiring, gas connections, or heating apparatus, or other cause, is a fire hazard.
- N.** Whenever any building or structure is in such a condition as to constitute a public nuisance known to the common law or in equity jurisprudence.
- O.** Whenever any portion of a building or structure remains on a site for more than 30 days after the demolition or destruction of the building or structure.

**24.15.065 Derelict Commercial Building.**

(Added by Ordinance No. 162525; amended by 164318 and 168901, effective June 7, 1995.) Any building or structure:

- A.** In which there are no dwelling units, and
- B.** Which is not an accessory building to a building in which there are dwelling units, and
- C.** Which building, structure or a portion thereof is unoccupied; and
- D.** Which meets any of the following criteria:
  - 1.** Has been ordered vacated by the Director pursuant to 24.55.250 F; or
  - 2.** Has been issued a correction notice by the Director pursuant to 24.55.250 A.; or
  - 3.** Is unsecured; or

## **TITLE 24**

### **BUILDING REGULATIONS**

4. Is boarded; or
5. Has been posted for violation of Section 18.03.050 more than once in any two year period; or
6. Has, while vacant, had a nuisance abated by the City pursuant to Sections 18.03.010 or 18.03.030.

#### **24.15.070 Director.**

(Amended by Ordinance No. 176955, effective October 9, 2002.) Director shall mean the Director of the Bureau of Development Services or a duly authorized representative of the Director.

#### **24.15.075 Dwelling Unit.**

(Added by Ordinance No. 168901, effective June 7, 1995.) One or more habitable rooms which are occupied by or designed or intended to be occupied by one person, or by a family or group of housemates living together as a single housekeeping unit.

#### **24.15.080 Exterior Property Area.**

Exterior property area is the open space on the premises and on adjoining property under the control of the owner or operator of such premises.

#### **24.15.090 Hearings Officer.**

Hearings Officer is the office of the Code Enforcement Hearings Officer created pursuant to Section 22.02.010 of the City Code.

#### **24.15.100 Imminently Dangerous.**

Imminently dangerous means any condition posing a direct and immediate threat to human life, health, or safety.

#### **24.15.110 Inspections Manager.**

(Amended by Ordinance No. 176955, effective October 9, 2002.) The Inspections Manager is the Director's duly authorized representative responsible for the administration of the Inspections Division of the Bureau of Development Services.

#### **24.15.115 Master Permit/Facilities Permit Program.**

(Added by Ordinance No. 172431; amended by Ordinance No. 173973, effective January 1, 2000.) The Master Permit/Facilities Permit program is a special alternative inspection program authorized under Oregon Revised Statute 455.190. This program is available to commercial/industrial building owners and building management companies to streamline the approval of maintenance/repair and tenant improvement work on their private facilities.

#### **24.15.120 Owner.**

Owner is any person, agent, firm, or corporation having a legal or equitable interest in a property.

**TITLE 24**  
**BUILDING REGULATIONS**

**24.15.130 Repair.**

Repair is the reconstruction or renewal of any part of an existing structure for the purpose of its maintenance.

**24.15.140 Residential Structure.**

Residential structure means any building or other improvements designed or intended to be used for residential purposes.

**24.15.150 Requested Inspection.**

Requested inspection means any additional inspection which is not part of the City's regular or mandated inspection program.

**24.15.160 Service Station Site.**

(Amended by Ordinance No. 169905, effective April 1, 1996.) A service station site shall mean premises improved as a Group S, Division 3, occupancy for use as automobile or truck service stations used for supplying fuel, oil, minor accessories, and trailers, excluding body and fender repair for passenger automobiles, trucks, and truck trailers at retail direct to the customer.

**24.15.170 Substandard.**

Substandard means in violation of any of the minimum requirements as set out in this Title.

**24.15.180 Special Inspector.**

Definition to be added.

**24.15.190 Subject Structure.**

(Amended by Ordinance No. 176955, effective October 9, 2002.) A subject structure is any abandoned, unsafe, or dangerous structure upon which the Bureau of Development Services has commenced abatement proceedings.

**24.15.200 Structure.**

A structure is that which is built or constructed, an edifice or building of any kind, or any piece or work artificially built up or composed of parts joined together in some definite manner.

**24.15.210 Swimming Pool.**

(Repealed by Ordinance No. 180330, effective August 18, 2006.)

**24.15.215 Tree Removal.**

(Added by Ordinance No. 168340; amended by Ordinance No. 184522, 185448 and 186053, effective January 1, 2015.) Tree Removal shall have the same meaning as "removal" as defined in Title 11 Trees.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **24.15.220 Unoccupied.**

(Added by Ordinance No. 162525; amended by 168901, effective June 6, 1970.) Not being used for a lawful occupancy.

#### **24.15.230 Unsafe.**

Means:

- A.** Any structure which is structurally unsafe or not provided with adequate egress, or which constitutes a fire hazard or is otherwise dangerous to human life.
- B.** Unsafe use is any use of structures constituting a hazard to health, safety, or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage, or abandonment.
- C.** Unsafe appendages are parapet walls, cornices, spires, towers, tanks, statuary, or other appendages or structural members which are supported by, attached to, or part of a building, and which are in a deteriorated condition or otherwise unable to sustain the design loads which are specified in the Oregon State Structural Specialty and Fire and Life Safety Code.

#### **24.15.240 Unsecured.**

(Added by Ordinance No. 162525, amended by 168901, effective June 7, 1995.) Any building or structure in which doors, windows, or apertures are open or broken so as to allow access by unauthorized persons.

#### **24.15.250 Value/Valuation.**

Value or valuation of a structure or building shall be the estimated cost to replace the structure or building in kind, based on either the building valuation data reported in the latest issue of the ICBO Building Standards Journal or by any alternate method approved by the Director to give an accurate assessment of building replacement costs.

#### **24.15.260 Warehousing.**

Warehousing means securing a structure against vandalism, deterioration, and unauthorized entry pending its return to active use or occupancy.

**CHAPTER 24.20 - SPECIAL INSPECTIONS**

(Chapter replaced by Ordinance No. 187432,  
effective December 4, 2015.)

**Sections:**

- 24.20.010 General.
- 24.20.020 Selection of the Special Inspectors and/or Agencies.
- 24.20.030 General Duties of the Special Inspector.

**24.20.010 General.**

- A. In addition to the inspections required under Section 110 of the Oregon Structural Specialty Code, the owner or the owner's agent shall employ a Special Inspector during construction of the types of work specified in Chapter 17 of the Oregon Structural Specialty Code or for cases specifically required by the Director.
- B. The Director shall have the authority to adopt and enforce written rules concerning the conduct and administration of special inspections in the City of Portland.

**24.20.020 Selection of the Special Inspectors and/or Agencies.**

With the approval of the Director, Special Inspectors and approved inspection and/or testing agencies shall be chosen and paid by the owner, and will report to the licensed architect or engineer whose signature and seal appear on the design drawings and to the Bureau of Development Services. No changes of Special Inspectors or inspection/testing agency approved by the Director shall be made without obtaining approval of the responsible architect/engineer and the Director.

**24.20.030 General Duties of the Special Inspector.**

(Amended by Ordinance No. 188647, effective November 17, 2017.)

- A. The Special Inspector shall observe the work assigned for conformance with the approved construction documents.
- B. The Special Inspector shall keep records of inspections and shall furnish inspection reports to the Director, the Registered Design Professional, as that term is defined in Chapter 2 of the Oregon Structural Code. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the Director.
- C. The Special Inspector/Inspection Agency shall submit a final signed summary report stating whether the work requiring special inspection was, to the best of their knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions in the State Building Code.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.25 - MOVING OF BUILDINGS**

##### **Sections:**

- 24.25.010      General.
- 24.25.020      Permit Information Required.
- 24.25.030      Direction of City Engineer.
- 24.25.040      Housing Code Inspection Report Required.

##### **24.25.010      General.**

No building shall be moved from one location to another until permits have been obtained.

##### **24.25.020      Permit Information Required.**

(Amended by Ordinance No. 188647, effective November 17, 2017.) The applicant shall file with the Director an application for a permit to move the structure, it shall be signed by the owner or the owner's authorized agent, and shall contain a description of the building to be moved, the location where it is to be moved, and the use and occupancy proposed, in addition to the information required by Section 24.10.070 of this Title regarding foundation or other work at the final location.

##### **24.25.030      Direction of City Engineer.**

(Amended by Ordinance No. 169905, effective April 1, 1996.) No building shall be moved across or along any street until the route to be followed and the time allowed for moving has been submitted to the City Engineer and approved by him. Moving shall be under the direction of the City Engineer. For the regulations covering the use of public streets see Chapter 33 of the Structural Specialty Code.

##### **24.25.040      Housing Code Inspection Report Required.**

The Director shall inspect any residential building that is proposed to be moved, to ensure its compliance with the provision of Title 29 of the Code of the City of Portland.

**CHAPTER 24.30 - HOME OCCUPATIONS**

**Sections:**

- 24.30.010      Permits Required.
- 24.30.020      Compliance with Planning and Zoning Regulations.
- 24.30.030      Fees for Home Occupations.

**24.30.010      Permits Required.**

A permit shall be required to establish a home occupation. The permit shall be renewed every 2 years to maintain said home occupation.

**24.30.020      Compliance with Planning and Zoning Regulations.**

All home occupations shall comply with the provisions of Title 33 of the Code of the City of Portland.

**24.30.030      Fees for Home Occupations.**

The fee for a home occupation permit shall be as provided in Section 24.10 of this Title.

**TITLE 24**  
**BUILDING REGULATIONS**

**CHAPTER 24.35 - HISTORICAL BUILDINGS**

(Chapter repealed by Ordinance No. 187432,  
effective December 4, 2015.)

**CHAPTER 24.40 - USE OF AND  
PROJECTIONS OVER PUBLIC STREETS  
AND PROPERTY**

**Sections:**

- 24.40.010 Street Use.
- 24.40.020 Dirt on Streets from Construction Projects.
- 24.40.030 Fees.

**24.40.010 Street Use.**

(Amended by Ordinance No. 169905, effective April 1, 1996.) A person undertaking work covered by a building permit, may, on proof of necessity, be entitled to a permit for use of the street, sidewalks, and/or roadway. Applications shall be subject to the approval of the Traffic Engineer and the Director. Material or equipment necessary for the work may be placed or stored on public property in the following locations:

- A. On the roadway, adjacent to the curb in front of the site for which a building permit has been issued.
- B. On the roadway in front of an adjoining site.
- C. On the public sidewalk, in front of the construction site, except on those sidewalks required to be kept open. A street use permit shall be issued for a minimum period of 1 week and a maximum period of 90 days. The permit may be extended if in the judgment of the Director an extension is warranted by existing conditions. The use of the street by persons holding a permit and/or the fencing-off of street space shall not be continued longer than is necessary. If the permit for street use is within the Special Traffic Control Districts outlined in Section 17.23.030, the prior approval of the City Engineer must be obtained if the street use extends beyond the curb line.

When work not requiring a building permit is undertaken for maintenance of buildings or structures in the congested areas where parking meters are located, the person undertaking such work shall not close off any portion of the sidewalk or roadway areas without first obtaining, subject to the approval of the Traffic Engineer, a street use permit; the time limit for such permit shall be as specified above. If the street use permit is within the special Traffic Control Districts outlined in Section 17.23.030, the prior approval of the City Engineer must be obtained if the street use extends beyond the curb line. While work is in progress, a roped-off passageway not less than 4 feet in width shall be maintained for pedestrians. This passageway shall be no closer, than 6 feet horizontally from any scaffold, ladder, machinery, or equipment. The passageway shall be entirely contained within the existing sidewalk area. The Director may also require pedestrian protection as outlined in Chapter 33 of the Structural Specialty Code. In order to ensure coordination of construction activity within the Street area and to provide that the

## **TITLE 24**

### **BUILDING REGULATIONS**

private and public needs are met, the Director may also require a preconstruction meeting as outlined in Section 24.10.090 of this Title.

#### **24.40.020      Dirt on Streets from Construction Projects.**

If dirt or debris falls on any public right-of-way and such debris originates from a construction project for which a building, plumbing, or electrical permit has been issued, it is unlawful for the permit holder and/or owner not to remove it immediately. Failure of either the owner and/or permit holder to remove the spillage within 24 hours after notification given either orally or in writing may result in the Director gaining compliance by any of the methods outlined in Section 24.10.060 of this Title.

#### **24.40.030      Fees.**

Fees for street use shall be as indicated in Section 24.10 of this Title.

**CHAPTER 24.45 - PARKING AND  
DRIVEWAY SURFACES**

**Sections:**

- 24.45.010 General.
- 24.45.020 Minimum Surfacing Standards for Parking Areas and Garages for Passenger Cars and Trucks not Exceeding 1/2-Ton Capacity and Driveways Serving Structure 150 Feet or Less from an Improved Public Right-of-Way.
- 24.45.030 Minimum Surfacing Standards for Driveways Serving Structures More than 150 Feet from an Improved Public Right-of-Way.
- 24.45.040 Minimum Surfacing Standards for Trucks Over 1/2-Ton Capacity and Other Vehicles.
- 24.45.050 Private Streets.

**24.45.010 General.**

All vehicular driveways, parking spaces, and areas utilized for the maneuvering of vehicles shall be surfaced in accordance with this Chapter.

**24.45.020 Minimum Surfacing Standards for Parking Areas and Garages for Passenger Cars and Trucks not Exceeding 1/2-Ton Capacity and Driveways Serving Structures 150 Feet or Less from an Improved Public Right-of-Way.**

(Amended by Ordinance No. 173270, effective May 21, 1999.) Surfaced areas shall be constructed on properly drained, well-compacted subgrade, that is free of organic materials. Minimum pavement structure shall be:

- A. Three and one-quarter inches Portland cement concrete having a compressive strength of 2,000 psi after 28 days, or
- B. One and one-half inches of asphalt concrete placed over a base of 4 inches of crushed stone or gravel, or
- C. Grid paving blocks, paving stones or materials with adequate spacing for drainage infiltration, or other stormwater management control surfaces. Where such surfaces are provided in accessible parking and as part of an accessible pedestrian path, the surfaces shall meet accessibility standards of the state building code.

**24.45.030 Minimum Surfacing Standards for Driveways Serving Structures More than 150 Feet from an Improved Public Right-of-Way.**

(Amended by Ordinance No. 173270, effective May 21, 1999.) Surfaced areas shall be constructed on properly drained, well-compacted subgrade, that is free of organic materials. Minimum pavement structure shall be:

- A. Two inches of asphalt concrete on 4 inches of 1-inch minus, compacted crushed rock; or

## **TITLE 24**

### **BUILDING REGULATIONS**

- B.** Five inches of Portland cement concrete having a compressive strength of 3,000 psi after 28 days, or
- C.** A driveway surfaced as per Section 24.45.020 for the first 40 feet contiguous with the right-of-way paving and the remaining portion of 8 inches of 1-inch minus, compacted crushed gravel over filter fabric, or
- D.** Grid paving blocks, paving stones or materials with adequate spacing for drainage infiltration, or other stormwater management control surfaces. Where such surfaces are provided in accessible parking and as part of an accessible pedestrian path, the surfaces shall meet accessibility standards of the state building code.

#### **24.45.040 Minimum Surfacing Standards for Trucks Over 1/2-Ton Capacity and Other Vehicles.**

Surface of parking, storing, and maneuvering areas for vehicles and motorized equipment not regulated elsewhere in this Chapter shall be by a method approved by the Director that will effectively eliminate dust, mud, or other contaminating elements on surrounding street areas and/or abutting property and be constructed of materials capable of supporting the maximum axle weight of the largest piece of equipment. At each street entrance, a concrete or asphalt driving apron shall extend from the right-of-way paving at least 40 feet into the surface area.

#### **24.45.050 Private Streets.**

(Amended by Ordinance No. 169228, effective August 23, 1995.) Private street improvements shall consist of 1-1/2 inches of Class “C” asphalt concrete on 1-1/2 inches of Class “B” asphalt concrete on 6 inches of 1-1/2 inch minus compacted crushed gravel upon a compacted subgrade that has achieved 95 percent compaction.

No gates or other barriers which would restrict vehicles or pedestrians from using the private street may be located on a private street approved under this section.

**CHAPTER 24.50 - FLOOD HAZARD AREAS**

(Chapter replaced by Ordinance No. 160413,  
effective January 14, 1988.)

**Sections:**

- 24.50.010 Purpose.
- 24.50.020 General.
- 24.50.030 Flood Related Definitions.
- 24.50.040 FIA Study and Flood Hazard Maps.
- 24.50.050 Flood Hazard Areas and Flood Protection Elevations.
- 24.50.060 Provisions for Flood Hazard Reduction.
- 24.50.065 Recreational Vehicles located in Areas of Special Flood Hazard or Base Flood Zones.
- 24.50.070 Appeals and Variances.

**24.50.010 Purpose.**

The purpose of this Chapter is to protect the public health, safety, and welfare by restricting or prohibiting uses which are dangerous to health, safety, or property in times of flood or which cause increased flood heights or velocities, and by requiring that uses and structures vulnerable to floods be protected from flood danger at the time of initial construction.

**24.50.020 General.**

(Amended by Ordinance No. 182370, effective November 26, 2008.)

- A.** The provisions of this Chapter shall regulate development and construction in flood hazard areas identified in Section 24.50.030.
- B.** Land classified in a flood hazard area may restrict or affect uses and development permitted in one or more of the regular zones listed in Chapter 33.16. If an inconsistency exists between Chapter 24.50 and other titles of this Code, the more restrictive uses or requirements shall prevail.
- C.** A structure or the use of a structure or property which was lawful before the original date of this Chapter but which is not in conformity with the provisions of this Chapter may be continued subject to provisions of the State Building Code, regulations for existing structures.
- D.** The flood protection elevations and the floodway and floodway fringe areas specified by this Chapter, based on the 100-year flood elevations, are considered reasonable. Greater flood heights and more extensive floodway fringe areas associated with longer flood frequency occurrences may occur or the flood height and extent of flooding may be increased by human or natural causes, such as log jams, bridge openings restricted by debris, or changes in basin conditions. Areas within designated drainage districts and those areas not covered by adequate

## **TITLE 24**

### **BUILDING REGULATIONS**

topographic maps may contain unmapped watercourses subject to flooding. The identification of designated flood hazard areas does not imply that lands outside of such areas will be free from flooding or flood damage.

The City of Portland or any officer or employee thereof, or the Federal Insurance Administration shall not be liable for any flood damages that result from reliance on the provisions or designations of this Chapter or any administrative decision lawfully made thereunder.

#### **24.50.030 Flood Related Definitions.**

(Amended by Ordinance Nos. 178741, 182370 and 184235, effective November 26, 2010.)  
The definitions contained in this Section relate to flood hazard areas and considerations outlined in this Chapter.

- A.** "Appeal" means a request for a review of the City of Portland's interpretation of any provision of this ordinance or a request for a variance.
- B.** "Area of shallow flooding" means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from 1 to 3 feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
- C.** "Areas of Special Flood Hazard" mean the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.
- D.** "Base Flood (100-year flood)" means the flood having 1 percent chance of being equaled or exceeded in any given year. Designation on maps always includes the letters A or V.
- E.** "Basement" means any area of the building having its floor subgrade (below ground level) on all sides.
- F.** "City Datum" means the reference datum for the City of Portland maps. The FIRM maps described in Section 24.50.050 are referenced to the North American Vertical Datum (NAVD) of 1988. To convert NAVD 1988 level to City datum, subtract 2.125 feet from the elevation referenced to NAVD 1988 level.
- G.** "Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings, bridges, other structures, and mining, dredging, filling, grading, paving, excavation, fencing, landscaping, drainage facilities, drilling operations, or storage of equipment or material.

**TITLE 24**  
**BUILDING REGULATIONS**

- H.** "Existing manufactured home park or manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including as a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the original date of this Chapter.
- I.** "Expansion to an existing manufactured home park or manufactured home Subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets).
- J.** "FIA" means Federal Insurance Administration.
- K.** "Flood Hazard Area" means any area which has been identified as subject to flooding.
- L.** "Flood Insurance Study" means the official report provided by the Federal Insurance Administration that contains information regarding flooding, discusses the engineering methods used to develop the Flood Insurance Rate Maps (FIRMs), includes flood profiles, and the water surface elevation of the base flood.
- M.** "Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Insurance Administration has delineated the areas of special flood hazards.
- N.** "Flood or flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, and/or the unusual and rapid accumulation of runoff of surface waters from any source.
- O.** "Flood protection elevation" means the water surface elevation of the base flood plus a freeboard allowance.
- P.** "Floodplain" means the channel of watercourse and adjacent land areas which are subject to inundation by the base flood.
- Q.** "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, sanitary, and water facilities, structures, and their contents.
- R.** "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. The actual

## **TITLE 24**

### **BUILDING REGULATIONS**

floodway boundaries are computer activated and approximate. These boundaries are depicted on the FIRM. Boundaries for other watercourses may be subject to identification by the Sewage System Administrator. The width of the floodway for unidentified watercourses should not be less than 15 feet.

- S.** "Flood fringe area" means any area lying outside the floodway which is subject to flooding by a base flood and for which water surface elevations and floodway and flood fringe boundaries have been determined by a Flood Insurance Study and are shown on the FIRMs. Boundaries for unidentified watercourses may be subject to identification by the Sewage System Administrator.
- T.** "Freeboard" means an additional height above the base flood level to account for factors that may contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as filling in the floodway fringe, wave action, effect of urbanization of the watershed, map inaccuracies, irregular stream cross sections, irregular constructions at bridges, and the uncertainties of flood discharge computations.
- U.** "Lowest Floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance found at Section 24.50.060 F.2.
- V.** "Manufactured home" means a structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.
- W.** "New construction" means structures for which the start of construction commenced on or after the effective date of this Chapter.
- X.** "New manufactured home park or manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lots on which the manufactured home is to be affixed (including as a minimum, the installation of utilities, either final site grading or the pouring of concrete pads and the construction of streets) is completed on or after the original date of this Chapter.
- Y.** "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair,

**TITLE 24**  
**BUILDING REGULATIONS**

reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets, walkways, sanitary sewers, storm sewers, and/or drainage facilities; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

- Z.** “Structure or accessory structure” means, for the purposes of this Chapter, a walled and roofed building including a gas or liquid storage tank that is principally above ground.
- AA.** “Substantial Damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- BB.** "Substantial Improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure, either:
1. Before the improvement or repair is started, or
  2. If the structure has been damaged, and is being restored, before the damage occurred. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.
- The term does not, however, include either:
- a. Any project for improvement of a structure to comply with existing State or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
  - b. Any alteration of a structure listed on the National Register of Historic Places or the State Inventory of Historic Places.
- CC.** “Variance” means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

## **TITLE 24**

### **BUILDING REGULATIONS**

- DD.** “Water surface elevation” means the height of the water surface of the base flood for any point along the longitudinal course of a stream.
- EE.** “Watercourse” means a channel in which a flow of water occurs, either continuously or intermittently, and if the latter, with some degree of regularity. Watercourses may be either natural or artificial.

#### **24.50.040 FIA Study and Flood Hazard Maps.**

(Amended by Ordinance Nos. 173979, 176955, 178741, 182671 and 184235, effective November 26, 2010.) The following study and maps in this Section are hereby adopted and declared to be a part of this Chapter.

- A.** Flood Insurance Study is the official scientific and engineering report entitled “Flood Insurance Study for City of Portland, Oregon: Multnomah, Clackamas and Washington Counties”, dated November 26, 2010 prepared by the Federal Insurance Administration (FIA) under agency agreement with the Portland District Corps of Engineers. The latest edition of the report, along with accompanying FIRMs, are on file with the Bureau of Development Services.
- B.** Flood Insurance Rate Maps (FIRMs) are the official maps entitled “The Flood Insurance Rate Maps (FIRMs) for City of Portland, Oregon: Multnomah, Clackamas and Washington Counties”, dated either October 19, 2004 or November 26, 2010, whichever is more current, on which the Federal Insurance Administration has delineated the areas of flood hazards along with the 100-year (base flood) and 500-year flood boundaries, the floodway zone boundaries and the 100-year flood elevations.
- C.** Water Features Map is the official map, dated May, 1981, or latest edition, compiled by the Bureau of Planning and Sustainability delineating certain watercourses which are subject to special flood hazard and drain 30 acres or more.
- D.** When base flood elevation data has not been provided by the FIA study, the Sewage System Administrator may obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source. This data shall be utilized only after technical review and approval of the Sewage System Administrator.
- E.** The "Title 3 Water Quality and Flood Management Area Map," as adopted by Metro Council on June 18, 1998, is the official map which identifies areas as "February 1996 Flood Inundation." The identified areas are subject to the regulations of this Title.

#### **24.50.050 Flood Hazard Areas and Flood Protection Elevations.**

(Amended by Ordinance Nos. 173979, 178741 and 182370, effective November 26, 2008.) Flood hazard areas shall contain all lands located within the Floodway boundary, Flood

## TITLE 24 BUILDING REGULATIONS

Zones within the Flood fringe areas, and other identified Flood Zones. Identified Flood Zones are depicted on the National Flood Insurance Rate Map (FIRM). Both identified and unidentified Flood Hazard areas along with flood protection elevations are described in the following. Figure 1 illustrates the basic flood hazard areas and elevations.

(See Figure 1 at the end of Title 24)

- A. Columbia River FIRM Flood Zone AE. These flood zones represent areas for which base flood elevations are determined. The flood protection elevation shall be the base flood elevation plus one foot of freeboard. The nominal one-foot increase for freeboard reflects the relatively wide flood plain of the Columbia River. In the vicinity of the confluence of the Columbia and Willamette Rivers, the Columbia River floodplain shall be considered to be east of the westerly floodway fringe boundary of the Columbia Slough.
- B. Multnomah Drainage District No. 1 and Peninsula Drainage District No. 2 FIRM Zone AH. This flood zone represents isolated areas of shallow flooding (1 to 3 feet in depth, resulting from upslope runoff) for which base flood elevations are determined. In the case of unidentified watercourses occurring within the boundaries of the Drainage Districts, the base flood elevation shall be estimated by procedures described in paragraph G. below. The flood protection elevation shall be the base flood elevations plus one foot of freeboard.
- C. Columbia River FIRM Flood Zone A. These flood zones represent areas for which base flood elevations are not determined. The flood protection elevation shall be either the grade at the adjacent flood fringe boundary or the crown of the nearest street, whichever is higher, plus one foot of freeboard.
- D. Willamette River FIRM Flood Zone AE. These flood zones represent areas for which the base flood elevations are determined. The flood protection elevation shall be the base flood elevation plus two feet of freeboard.
- E. Johnson Creek, Fanno Creek and Crystal Springs Creek FIRM Flood Zone AE. This flood zone represents area for which the base flood elevations are determined. The flood protection elevation shall be the base flood elevation plus two feet of freeboard.
- F. Johnson Creek FIRM Flood Zone AH. This flood zone represents areas of shallow flooding depth (1 to 3 feet) for which base flood elevations are determined. The flood protection elevation shall be the base flood elevation plus two feet of freeboard.
- G. Johnson Creek FIRM Flood Zone AO. This flood zone represents areas of shallow flooding depth (1 to 3 feet) for which the depths of flooding are determined. The flood protection elevation shall be the depth of flooding shown on the FIRM map plus two feet of freeboard above the highest adjacent grade.

## **TITLE 24**

### **BUILDING REGULATIONS**

- H.** Johnson Creek, Fanno Creek, Tryon Creek, and Crystal Springs Creek FIRM Flood Zone A. These flood zones represent areas for which base flood elevations are not determined. The flood protection elevation shall be the base flood elevation plus two feet of freeboard. Base flood elevations shall be calculated in accordance with paragraph I. below.
- I.** Unidentified Watercourse Flood Zones. These watercourses, generally draining one acre or more, are not identified in a Federal Insurance Study and may not be identified on the Water Features map. The flood protection elevation shall be the base flood elevation plus two feet of freeboard. The width of the floodway shall not be less than 15 feet. The floodway boundary, flood fringe boundary, and flood protection elevation data shall be based upon watercourse geometry, slope, channel roughness, effect of obstructions, backwater and other factors which affect flood flow. The requisite flood hazard data, maps, and sections shall be obtained and developed by procedures approved by the Sewage System Administrator. When appropriate and necessary data are available, the flood protection elevation and floodway and flooding fringe boundary data may be provided by the Sewage System Administrator. If pertinent hydrologic data and topographic data are not available, inaccurate, or outdated, and where substantial alterations or relocations of a watercourse are involved, the Sewage System Administrator may require the permit applicant to secure a registered engineer and surveyor to develop and supply the requisite flood hazard data, maps, and sections.
- J.** Metro Flood Management Areas. Flood 1996 inundation areas shown on Metro Title 3 Water Quality and Flood Management Area Maps shall have a flood protection elevation which provides two feet of freeboard above the Flood 1996 level. Flood 1996 inundation areas adjacent to Columbia River FIRM Flood Zone AE, Multnomah Drainage District No. 1, Peninsula Drainage District No. 2 Firm Zone AH and Columbia River FIRM Flood Zone A shall have freeboard of one foot.

#### **24.50.060 Provisions for Flood Hazard Reduction.**

(Amended by Ordinance Nos. 165678, 169905, 172209, 173979, 176955, 178741, 182370 and 184235, effective November 26, 2010.) In all flood hazard areas defined in Section 24.50.050, the following provisions are required:

- A.** Permits. All permit applications shall be reviewed to determine whether proposed building sites will be reasonably safe from flooding. A development or building permit shall be obtained before construction or development begins within any area of flood hazard. Such applications for permits shall include the following specific information:

  - 1.** Elevation of lowest floor, including basement, for all structures and floodproofed elevations for nonresidential structures.

**TITLE 24**  
**BUILDING REGULATIONS**

2. Elevation of lowest point of bridge structures.
  3. Existing and proposed topography of the site taken at a contour interval (normally 1 foot) sufficiently detailed to define the topography over the entire site and adjacent watercourses subject to flooding. Ninety percent of the contours shall be plotted within 1 contour interval of the true location.
  4. All necessary permits obtained from the federal and state governmental agencies from which prior approval is required.
  5. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (Section 24.50.050 G.), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of any available hydrological data, drainage basin hydrology, historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.
- B.** Elevation reference. The survey reference datum for finished lowest floor including basement, floodproofed elevations, and finished site grades shall be either the North American Vertical Datum of 1988 or City of Portland datum, whichever is appropriate. When approved by the City Engineer, a local onsite survey reference datum may be adopted for FIRM Zones A and Unidentified Watercourse Flood Zones. The survey reference datum shall be indicated on all relevant plan and Section drawings, and the certified Flood-Elevation Certificate.
- C.** Certification of elevations and floodproofing. All finished elevations as specified hereunder shall be certified on a FEMA (FIA) Elevation Certificate by a licensed surveyor secured by the permittee, and made part of the permit records.
1. As-built elevation of lowest floor including basement, of all new or substantially improved structures;
  2. As-built floodproofed elevation of all new or substantially improved nonresidential structures;
  3. As-graded elevation of lowest grade within 25 feet of structures;
  4. As-graded elevation of lowest crawl space grade, as applicable.
- All floodproofing materials and methods for nonresidential structures shall be certified by a licensed professional engineer or architect as meeting the criteria in Section 24.50.060 F7.

## **TITLE 24**

### **BUILDING REGULATIONS**

- D.** Floodway. Encroachments into the floodway by development and structures defined in Section 24.50.020 are prohibited unless it is demonstrated by technical analysis from a registered engineer that the development will result in no increase in the base flood elevation. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement or other development (including fill) shall be permitted within Zone AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the community. Technical analysis shall be reviewed and approved by the Sewage System Administrator. However, the minimum width of the floodway shall not be less than 15 feet.
- E.** Alteration of watercourses. The Bureau of Development Services shall:

  - 1.** Notify adjacent communities and the Department of Land Conservation and Development prior to any alteration or relocation of a watercourse as identified in the Flood Insurance Study and Flood Insurance Rate Map, and submit evidence of such notification to the Federal Insurance Administration.
  - 2.** Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
- F.** Special flood hazard areas.

  - 1.** General. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
  - 2.** Residential construction.

    - a.** New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above flood protection elevation. Floodproofing of “lowest floor” space is not permitted.
    - b.** Fully closed areas below the lowest floor that are subject to flooding are prohibited or shall be used solely for parking of vehicles, building access or limited storage and be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

**TITLE 24**  
**BUILDING REGULATIONS**

- (1)** A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
- (2)** The bottom of all openings shall be no higher than one foot above grade;
- (3)** Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
  - (a)** Fills required to elevate the lowest floor to the flood protection level shall comply with Chapter 24.70. Fill selection and placement shall recognize the effects of inundation from floodwaters on slope stability, fill settlement, and scour. The minimum elevation at the top of the fill slope shall be at the base flood level. Minimum distance from any point of the building perimeter to the top of the fill slope shall be either 25 feet or twice the depth of fill at that point, whichever is the greater distance.
  - (b)** Piling foundations required to elevate the lowest habitable floor to the flood protection level shall comply with Section 1809 and 1808 of the Structural Specialty Code. Pilings shall be spaced no more than 10 feet apart, and reinforcement shall be provided for piling more than 6 feet above the ground level.

**3.** Subdivision proposals.

- a.** All subdivision proposals shall be consistent with the need to minimize flood damage;
- b.** All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- c.** All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,
- d.** Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

## **TITLE 24**

### **BUILDING REGULATIONS**

- 4.** Nonresidential construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the flood protection elevation, or, together with attendant utility and sanitary facilities, shall:

  - a.** Be floodproofed so that below the flood protection elevation the structure is watertight with walls substantially impermeable to the passage of water;
  - b.** Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
  - c.** Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Bureau of Development Services.
  - d.** Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described for residential structures.
  - e.** Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).
- 5.** Manufactured homes. All manufactured homes to be placed or substantially improved within Zones AO, AH and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the flood protection elevation and be securely anchored to prevent flotation, collapse or lateral movement and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Refer to FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
- 6.** Utilities. All new and replacement water supply and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the sanitary sewage systems into flood waters. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

**TITLE 24**  
**BUILDING REGULATIONS**

7. Construction materials and methods. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, using methods and practices that minimize flood damage. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
  8. Balanced Cut and Fill Required. In all Flood Management Areas of the City not addressed by Section 24.50.060 G, balanced cut and fill shall be required. All fill placed at or below the base flood elevation shall be balanced with at least an equal amount of soil material removal. Soil material removal shall be within the same flood hazard area identified in Section 24.50.050 A. through I.
    - a. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
    - b. Temporary fills permitted during construction shall be removed.
  9. Tank anchoring. Tanks containing hazardous materials must be anchored to prevent flotation if they are located in areas of special flood hazard or flood management areas.
  10. Uncontained hazardous materials as referred to in Section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S. Section 9601 et seq.) (CERCLA), section 502 (13) of the Clean Water Act and any other substances so designated by the Director of the Bureau of Development Services are prohibited in flood management areas.
  11. AH/AO Zone Drainage. Adequate drainage paths shall be provided around structures on slopes to guide floodwaters around and away from proposed structures.
- G. Johnson Creek Flood Zones - Special Provisions.** In addition to other requirements of this chapter the following requirements shall apply within designated portions of the Johnson Creek Flood Zones:
1. All Johnson Creek Flood Zones
    - a. Balanced cut and fill. Within all areas of the Johnson Creek Flood Zones, all new fills below the base flood elevation shall be accompanied by an equal amount of excavation on the same site so

## **TITLE 24**

### **BUILDING REGULATIONS**

that the storage capacity of the floodway and floodway fringe is retained.

- b.** Mitigation payment allowed in lieu of balanced cut and fill. After September 1, 1998 residential properties within the area of the 100 year floodplain, but outside of the floodway and Flood Risk Area, and bounded by I-205 on the west, SE 142nd Avenue on the east, and the Springwater Corridor Trail on the south, may elect to pay into the Johnson Creek Fill Mitigation Bank in lieu of creating a balanced cut and fill. The amount of the payment shall be determined by the Bureau of Environmental Services.

**2.** Johnson Creek Flood Risk Area. The following provisions shall apply within the Johnson Creek Flood Risk Area, as established in Chapter 33.535 of the City Code:

- a.** Balanced cut and fill. The requirements of subsection G.1. above, shall apply within the Johnson Creek Flood Risk Area.
- b.** Reduction in flooding capacity prohibited. Structures, fill or other development shall only be allowed in the Johnson Creek Flood Risk Area when they are designed so that there is no significant reduction in the storage capacity of the floodway and floodway fringe and there is no significant impediment to the passage of flood waters.
- c.** Exceptions to Section 24.50.060 G.2.:
  - (1)** One story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
  - (2)** Parking garages accessory to one and two family structures, provided the floor area does not exceed 300 square feet.
  - (3)** Fences which do not prevent the flow of water.
- d.** Buildings designed to meet all of the following criteria shall be presumed to comply with Section 24.50.060.G.2.:
  - (1)** At least 50 percent of perimeter walls located at, or below, the base flood elevation shall remain open and unenclosed;
  - (2)** At least 25 percent of each perimeter wall located at, or below, the base flood elevation shall remain open and unenclosed; and

- (3)** The footprint of all portions of the building located at, or below, the base flood elevation shall not exceed 15 percent of the footprint of the building located above the base flood elevation.

**24.50.065 Recreational Vehicles located in Areas of Special Flood Hazard or Base Flood Zones.**

(Added by Ordinance No. 180330, effective August 18, 2006.)

- A.** Any recreational vehicle placed on a site located in either an Area of Special Flood Hazard or in the base flood zone shall:

  - 1.** Meet the elevation and anchoring requirements for manufactured homes;
  - 2.** Be on the site for fewer than 180 consecutive days; or
  - 3.** Be fully licensed and ready for highway use. As used in this section, “ready for highway use” means that the vehicle is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and has no permanently attached additions.
- B.** For the purpose of this section, “recreational vehicle” means any vehicle which is:

  - 1.** Built on a single chassis;
  - 2.** 400 square feet or less when measured at the largest horizontal projection;
  - 3.** Designed to be self propelled or permanently towable by a light duty truck; and
  - 4.** Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

**24.50.070 Appeals and Variances.**

(Amended by Ordinance No. 178741, effective October 19, 2004.)

- A.** Appeals. Any person aggrieved by a requirement, decision, or determination made pursuant to the administration of this Chapter may appeal such action to the Building Board of Appeal in accord with Chapter 24.10.
- B.** Variances. If variances from requirements of this Chapter are requested, all relevant factors and standards specified in other sections of this Chapter shall be considered, as well as the following:

  - 1.** The danger that materials may be swept into other lands to the injury of others;

## **TITLE 24**

### **BUILDING REGULATIONS**

2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations, not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing anticipated development;
8. The relationship of the proposed use to the Comprehensive Plan and Floodplain Management Program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
11. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges; Upon consideration of the factors listed above and the purposes of this Chapter, such conditions may be attached to the granting of variances as deemed necessary.

#### **C. Conditions for variances.**

1. Generally the only condition under which variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1-11) have been fully considered. As the lot size increases, the technical justification required for issuing the variance increases.
2. Variances shall not be issued within designated floodway if any increase in flood levels during the base flood discharge would result.

**TITLE 24**  
**BUILDING REGULATIONS**

3. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this Section.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
  - a. A showing of good and sufficient cause,
  - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant, and
  - c. A determination that the granting of a variance would not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
6. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
7. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
8. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 24.50.070 C.1. and otherwise complies with Section 24.50.060 F.1. and 24.50.060 F.7.

## **TITLE 24 BUILDING REGULATIONS**

### **CHAPTER 24.51 - WILDFIRE HAZARD ZONES**

(Chapter added by Ordinance No. 177433, effective  
May 30, 2003.)

#### **Sections:**

- 24.51.010 Purpose.
- 24.51.020 Definitions.
- 24.51.030 Wildfire Hazard Zone Map Adoption.
- 24.51.040 Map Revision Process.
- 24.51.050 Appeals of Decisions Made by the Chief.
- 24.51.060 General.

#### **24.51.010 Purpose.**

The purpose of this Chapter is to adopt the criteria that will be used to specify areas of the City to be classified as Wildfire Hazard Zones, so that roof materials may be limited.

#### **24.51.020 Definitions.**

(Amended by Ordinance No. 180917, effective May 26, 2007.) The definitions contained in this Section relate to Wildfire Hazard zones and considerations outlined in this Chapter.

- A.** Chief means the Chief of Portland Fire & Rescue or the Chief's duly authorized representative.
- B.** Department of Forestry (DOF) means the State of Oregon Department of Forestry.
- C.** Wildfire Hazard Zone means those areas of the City as determined by the Chief that rate a minimum score of 5 or higher using the following criteria developed by DOF:
  - 1.** Topography hazard factor value
  - 2.** Natural vegetative fuel hazard factor value
  - 3.** Natural vegetative fuel distribution hazard factor value
- D.** Wildfire Hazard Zone Map means the WHZM attached to Ordinance No. 177433 and as it may be amended from time to time based on the criteria herein.
- E.** Hazard Factor. Hazard Factors are topography, certain natural vegetative fuels and natural, vegetative fuel distribution. Any of these factors, or a combination thereof, may cause an area of the City to be included within a Wildfire Hazard Zone.
- F.** Topography Hazard Factor Value means the hazard value as determined by DOF associated with site slope which effects the fire spread velocity.

- G.** Natural Vegetative Hazard Factor Value means the numerical value assigned by DOF, extrapolated from the “Aids to Determining Fuel Models for Estimating Fire Behavior” published by the Forest Service, USDA Intermountain Forest and Range Experiment Station in 1982 as General Technical Report INT-122, for various common vegetation.
- H.** Natural Vegetative Fuel Distribution Hazard Factor Value means the numerical value assigned by DOF for the percentage of site that is covered by vegetation described in 24.51.020 G.

**24.51.030 Wildfire Hazard Zone Map Adoption.**

- A.** Wildfire Hazard Zone Map Adoption.
  - 1.** A Wildfire Hazard Zone Map (WHZM) has been developed for the City of Portland through a review of topography, weather, type vegetation and fuel density. This map is dated October 11, 2002.
  - 2.** The WHZM dated October 11, 2002, is hereby adopted by reference and incorporated into this ordinance.
  - 3.** The Chief shall provide the Director with a copy of the official map adopted in Subsection one of this Section. Copies of the map shall be available for review in the Development Services Center, First Floor 1900 SW 4th Avenue, Portland Oregon.
- B.** Revisions to the Wildfire Hazard Zone Map.
  - 1.** The WHZM may be amended from time to time to either include or exclude properties as the facts may warrant.
  - 2.** The Chief shall have the authority to revise the Wildfire Hazard Zone Map.
  - 3.** All Wildfire Hazard Zone map revisions shall be determined using the criteria set forth below. Any site having a cumulative hazard value of five (5) or more shall be included in a wildfire hazard zone.
    - a.** Topography Hazard Factor Value. The topography hazard value shall be calculated as follows:
      - (1)** Determine site slope using the appropriate 7.5 minute quadrangle map published by the U.S. Geological Survey, USDI.
      - (2)** Select appropriate hazard value using Table 1.

**TITLE 24  
BUILDING REGULATIONS**

**TABLE 1  
APPROPRIATE TOPOGRAPHY  
HAZARD FACTOR VALUE**

<b>Site Slope as determined by the 7.5 minute quadrangle map</b>	<b>Hazard Value</b>
Slopes 00 to < 03%	0
Slopes 03 to < 12%	1
Slopes 12 to < 20%	2
Slopes 20% or greater	3

- b.** Natural Vegetative Fuel Hazard Factor Value. The natural vegetative fuel hazard value shall be calculated as follows:
- (1)** Divide the jurisdiction into geographic areas which best describe the natural vegetation expected to occupy sites for the next 10 to 15 years.
  - (2)** Select the appropriate hazard value from Table 2.

**TABLE 2  
NATURAL VEGETATIVE FUEL  
HAZARD FACTOR VALUE**

<b>Natural Vegetative Fuel Description 1</b>		<b>Hazard Value 2</b>
<b>Limited</b>	Little or no natural vegetative fuels are present.	0
<b>Grass</b>	Very little shrub or timber is present, generally less than one-third of the area. Main fuel is generally less than two feet in height. Fires are surface fires that move rapidly through cured grass and associated material. (Fuel model 1)	3

**TITLE 24**  
**BUILDING REGULATIONS**

<b>Natural Vegetative Fuel Description 1</b>		<b>Hazard Value 2</b>
<b>Grass</b>	Open shrub lands and pine stands or scrub oak stands that cover one-third to two-thirds of the area. Main fuel is generally less than two feet in height. Fires are surface fires that spread primarily through the fine herbaceous fuels, either curing or dead. (Fuel model 2)	3
<b>Grass</b>	Beach grasses, prairie grasses, marshland grasses and wild or cultivated grains that have not been harvested. Main fuel is generally less than four feet in height, but considerable variation may occur. Fires are the most intense of the grass group and display high rates of spread under the influence of wind. (Fuel model 3)	3
<b>Shrubs</b>	Stands of mature shrubs have foliage known for its flammability, such as gorse, manzanita and snowberry. Main fuel is generally six feet or more tall. Fires burn with high intensity and spread very rapidly. (Fuel model 4)	3
<b>Shrubs</b>	Young shrubs with little dead material and having foliage not known for its flammability, such as laurel, vine maple and alders. Main fuel is generally three feet tall or less. Fires are generally carried in the surface fuels and are generally not very intense. (Fuel model 5)	1

**TITLE 24**  
**BUILDING REGULATIONS**

<b>Natural Vegetative Fuel Description 1</b>		<b>Hazard Value 2</b>
<b>Shrubs</b>	Older shrubs with foliage having a flammability less than fuel model 4, but more than fuel model 5. Widely spaced juniper and sagebrush are represented by this group. Main fuel is generally less than six feet in height. Fires will drop to the ground at low wind speeds and in stand openings. (Fuel model 6)	2
<b>Timber</b>	Areas of timber with little undergrowth and small amounts of litter buildup. Healthy stands of lodgepole pine, spruce, fir and larch are represented by this group. Fires will burn only under severe weather conditions involving high temperatures, low humidity and high winds. (Fuel model 8)	1
<b>Timber</b>	Areas of timber with more surface litter than fuel model 8. Closed stands of healthy ponderosa pine and white oak are in this fuel model. Spread of fires will be aided by rolling or blowing leaves. (Fuel model 9)	2
<b>Timber</b>	Areas of timber with heavy buildups of ground litter caused by over-maturity or natural events of wind throw or insect infestations. Fires are difficult to control due to large extent of ground fuel. (Fuel model 10)	3
<p><b>1.</b> Some areas may contain vegetative fuels other than those listed in Table 2. Additional natural fuel hazard factors may be found in “Aids to Determining Fuel Models for Estimating Fire Behavior” published by the Forest Service, USDA Intermountain Forest and Ranger Experiment Station in 1982 as General Technical Report INT-122. Vegetative fuel hazard factors determined using General Technical Report INT-122 shall be used as alternative factors, for review under this chapter, as the facts warrant.</p>		

**TITLE 24  
BUILDING REGULATIONS**

Natural Vegetative Fuel Description 1	Hazard Value 2
<p><b>2.</b> Due to various factors, such as variations in local vegetation species or vegetation conditions, the fuel models used in Table 2 may not accurately portray wildfire behavior. The Chief may make modifications to the hazard values as necessary to accurately reflect the following characteristics:</p> <p style="padding-left: 40px;"><b>(a)</b> A hazard value of 1 shall describe vegetation that typically produces a flame length of up to 5 feet, a wildfire which exhibits very little spotting, torching, or crowning, and which results in a burned area that can normally be entered within 15 minutes.</p> <p style="padding-left: 40px;"><b>(b)</b> A hazard value of 2 shall describe vegetation that typically produces a flame length of 5 to 8 feet, a wildfire which exhibits sporadic spotting, torching, or crowning, and which results in a burned area that can normally be entered within one hour.</p> <p style="padding-left: 40px;"><b>(c)</b> A hazard value of 3 shall describe vegetation that typically produces a flame length of over 8 feet, a wildfire that exhibits frequent spotting, torching, or crowning, and which results in a burned area that normally cannot be entered for over one hour.</p>	

- c.** Natural Vegetative Fuel Distribution Hazard Factor Value . To determine the natural vegetative fuel distribution hazard factor value:
- (1)** Determine the percentage of each individual area that is covered by vegetation.
  - (2)** Using the calculated percentage, assign a value using Table 3.

**TABLE 3  
NATURAL VEGETATIVE FUEL  
DISTRIBUTION HAZARD FACTOR**

Natural Vegetative Fuel Distribution	Hazard Value
0 to 10% of the area	0
10 to 25% of the area	1
25 to 40% of the area	2

**24.51.040 Map Revision Process.**

- A.** Wildfire Hazard Zones may be applied to or removed from areas of the City as follows:

## **TITLE 24**

### **BUILDING REGULATIONS**

1. During periodic review by the Chief, based upon the criteria listed in section 24.51.030. Periodic review shall occur every 5 years.
  2. Upon request to the Chief by any property owner, prior to periodic review, on the grounds that conditions have changed.
- B.** Prior to applying the Wildfire Hazard Zone to any property the Chief shall provide notice of such proposed zoning and provide a date for a public hearing.

The notice shall be sent to all properties to which the zone would be applied. The notice shall be sent fourteen days prior to the date of the hearing. Extensions of time for the hearing may be requested and may be provided by the Chief. The notice shall provide information regarding the City's intention to apply the Wildfire Zone, the reasons therefore and the time and place for the hearing.

Within 7 days of the hearing the Chief shall issue a written decision, based upon the criteria listed above, and which shall include findings supporting that decision and shall contain information regarding the right to appeal the Chief's decision to the Bureau of Development Service's Appeals Board (Board). A copy of the decision shall be sent to all properties that received notice of the City's intention to include these properties within a Wildfire Hazard Zone.

- C.** When a property owner provides the Chief with a written request that the Wildfire Hazard Zone be removed from specific property the Chief shall consider the request and, based upon the criteria listed above, shall either approve or deny the request.

Such action by the Chief shall occur within 14 days of the date of the request and shall be in writing, shall include findings based upon the facts and criteria and shall contain information regarding the right to appeal the Chief's decision to the Board. This decision shall be mailed to the property owner requesting the change in status.

#### **24.51.050 Appeals of Decisions Made by the Chief.**

Notwithstanding any contradictory portion of Code Section 24.10.080:

- A.** Any decision made by the Chief, regarding the application of a Wildfire Hazard Zone to any area in the City, may be appealed to the Bureau of Development Services Board of Appeals (Board) solely in accordance with this subsection. In considering such appeals the Board shall act solely in accord with this section.
- B.** Such appeal shall be in writing and shall be filed with the Board within fourteen days of the date of the Chief's decision. The appeal shall include a statement regarding the elements of the Chief's decision with which the appellant takes issue. Reference to facts and the criteria listed above, is required.

**TITLE 24**  
**BUILDING REGULATIONS**

- C.** A copy of the appeal shall be provided to the Chief at the same time that it is filed with the Board. The Chief shall have fourteen days from the date of the appeal to respond, in writing, to the Board and all appellants.
- D.** The Board shall issue a notice of a hearing date and the place and time of the hearing. Notice shall be provided to the appellants and the Chief.
- E.** The Board shall then hold a hearing upon any such appeal. After considering the issues raised on appeal, and the reasonableness of the Chief's interpretation of applicable criteria, the Board shall, by majority vote, affirm or modify the Chief's decision. The Board's decision shall be based solely upon the criteria set out in this Chapter and shall include findings addressing the facts and the criteria. The decision of the Board shall have full force and effect. A certified copy of the decision shall be delivered to the appellant.

Any appeal of the Board's decision shall by writ of review.

**24.51.060 General.**

(Amended by Ordinance Nos. 178745 and 179125, effective April 1, 2005.)

- A.** In addition to the other City codes, all structures located in wildfire hazard zones as identified in the Wildfire Hazard Zone map shall meet the applicable requirements in the State of Oregon Structural Specialty Code or the Residential Specialty Code as applicable.
- B.** The requirements in Chapter 24.75, Uniform Building Address System, supercede the requirements found in OSSC Appendix L, Section L101.7, for premises identification.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.55 - BUILDING DEMOLITION**

(Chapter amended by Ordinance No. 171455,  
effective August 29, 1997.)

##### **Sections:**

- 24.55.100 Demolition - Debris - Barricades - Nuisances.
- 24.55.150 Definitions.
- 24.55.200 Residential Demolition Delay - Housing Preservation.
- 24.55.205 Site Control Measures in Residential Demolitions.
- 24.55.210 Major Residential Alterations and Additions.

##### **24.55.100 Demolition - Debris - Barricades - Nuisances.**

(Amended by Ordinance Nos. 171455, 187017 and 189012, effective June 13, 2018.) It is unlawful for any owner or persons in control of any such structure which is being demolished, or which has been damaged by fire, to leave any portion of the structure unsupported for more than 1 hour, if such section is liable to collapse or is in any way a danger to the public. In no event shall a portion of the structure be left unsupported for more than 24 hours. Suitable barricades shall be provided to prevent access to the vicinity of any unsupported section of the structure. Any permanent structural supports provided as a result of application to this section shall be designed by a structural engineer registered to practice in the State of Oregon and hired by the applicant. All such designs, calculations, drawings, and inspection reports shall be approved by the Director.

All combustible debris or material shall be removed from the premises on which the demolition is carried out within 30 days from the completion of the demolition, or from the stoppage of the work thereon if the work remains uncompleted. All non-combustible debris or material resulting from demolition shall be removed within 30 days after the completion of the demolition or stoppage thereof, unless the Director extends the time therefore because of weather, terrain, or other special circumstances, but such extension shall not exceed 3 months. It is unlawful for any owner or person in possession of real property to permit the debris to remain on the property without disposal in excess of the periods mentioned above or of any specific extension thereof as set forth above.

Any of the above-mentioned things existing while there is a duty to remove or correct the same, shall constitute a public nuisance. Any unsupported portions of a building or structure existing beyond the periods set forth above shall be subject to summary abatement by the City. The abatement shall be in accordance with the procedure set forth in Title 29, Chapter 29.60, Administration and Enforcement.

All structures to be demolished shall be taken down in a safe manner. The streets or sidewalks shall not be littered with rubbish and shall be wet down, if necessary. During any demolition work, all receptacles, drop boxes, shafts, or piping used in such demolition work shall be covered in an appropriate manner. After removal of any structure all foundations that are not to be used for new construction shall be removed and all excavations filled in compliance with Chapter 24.70 of this Title, to a level of the adjoining grade. Plans shall be submitted for any new construction proposed, utilizing the remaining foundations. Any remaining foundations approved for further use shall be barricaded by a

fence no less than 6 feet high maintained until the new construction has progressed sufficiently to remove any hazards to the public. Such period of time is not to exceed 30 days. For regulations on the use of public streets and protection of pedestrians during demolition see Chapter 24.40 of this Title.

**24.55.150 Definitions.**

(Added by Ordinance No. 187017; amended by Ordinance Nos. 188802, 189012 and 189078, effective July 18, 2018.)

- A.** Demolition. Demolition means removal of all exterior walls above the foundation.
- B.** Major Residential Addition. Major residential addition means adding more than 500 square feet of new interior space and expanding the structure's footprint or envelope. The new interior space does not include areas of existing space within the building envelope.
- C.** Major Residential Alteration. Major residential alteration means removing 50 percent or more of the exterior walls above the foundation.
- D.** Recognized organization. Recognized organization includes neighborhood coalitions and neighborhood associations recognized by the Portland Office of Community & Civic Life.
- E.** Demolition Manager. Demolition manager means the person designated by the property owner or demolition permit applicant who will be responsible for implementing and overseeing the Demolition Plan and who will be the contact person for BDS and other regulatory agencies regarding the Demolition Plan. The Demolition Manager must have knowledge regarding erosion and sediment control, site control, and proper handling of materials generated from the demolition activities. The Demolition Manager is a "responsible party" as defined in this Section 24.55.150.
- F.** Demolition Plan. Demolition plan means the plan signed by the Demolition Manager that outlines the techniques and equipment that the Demolition Manager will use on the demolition site to control dust and debris generated during the demolition activities. The Demolition Plan must also include the anticipated timeframe for the demolition, a description of the site control measures set forth in Section 24.55.205 C. and monitoring processes that will be followed on the site before, during, and after the demolition activities, details of pedestrian protection where required, and a description of how the site will be secured against accessibility by any unauthorized persons. The Demolition Plan must include erosion and sediment control measures required by this Chapter 24.55, Title 10 and Chapter 17.39 of the Portland City Code, the City of Portland Erosion and Sediment Control Manual, the City of Portland Source Control Manual, and any other City of Portland regulations governing erosion, sediment control, stormwater control, or

## **TITLE 24**

### **BUILDING REGULATIONS**

wastewater generated from the demolition activities covered by this Section 24.55.205. The Plan must also include contact information for the Demolition Manager.

- G.** Mechanical demolition activities. Mechanical demolition activities means pulling down any part of a structure using mechanical tools such as cranes, bulldozers, excavators, rams, or similar heavy machinery.
- H.** Deconstruction. Deconstruction means demolition via the systematic dismantling of a structure or its parts, typically in the opposite order it was constructed, which can include the selective use of heavy machinery.
- I.** Full deconstruction. Full deconstruction means systematically dismantling 100% of the building, including finishes, core, shell, frame, mechanical, electrical, and plumbing fixtures and only using machinery to move and process materials once they are removed.
- J.** Lead-containing. Lead-containing means paint or other surface coatings that contain lead equal to or exceeding 1.0 milligram per square centimeter, 0.5 percent by weight, or 5,000 parts per million (ppm).
- K.** Responsible party. Responsible party means the property owner or person authorized to act on the owner's behalf and any person causing or contributing to a violation of this Title.

#### **24.55.200 Residential Demolition Delay - Housing Preservation.**

(Amended by Ordinance Nos. 171455, 176955, 187017, 187711, 188259, 188802 and 189012, effective June 13, 2018.)

- A.** Purpose. The residential demolition delay provisions are intended to allow an adequate amount of time to help save viable housing in the City while recognizing a property owner's right to develop or redevelop property. The regulations provide an opportunity for public notice of impending residential demolitions and coordination of the efforts of various City bureaus. The regulations also encourage seeking alternatives to demolition. The provisions accomplished this through a two part process:
  - 1.** a 35 day notice period during which demolition is delayed, and
  - 2.** a possible 60-day extension of the demolition delay period.
- B.** Where the delay applies. The residential demolition delay regulations of this Section (24.55.200) apply to sites with residential structures that are regulated under the Oregon Residential Specialty Code and that are located in areas with a residential Comprehensive Plan Map designation. The regulations only apply to

**TITLE 24**  
**BUILDING REGULATIONS**

applications for demolition of residential structures. They do not apply to demolitions of accessory structures such as garages or other outbuildings.

**C.** Application for building permit for demolition.

1. Signed statement. The application for a building permit for demolition must include a statement signed by the owner(s) of the property. The statement must acknowledge that the owner(s) are aware of the primary uses permitted under the current zoning on the site without a conditional use, zone change, Comprehensive Plan Map amendment, or other land use approval and that such an approval will be required before other uses will be permitted on the site. The statement may be on forms that the Director may make available.
2. Delay in issuing. The building permit for demolition will not be issued except as provided for in this Section (24.55.200).

**D.** Notification.

1. Mailed notice. Within 5 days of receipt of a complete application for a residential demolition permit, the Bureau of Development Services will mail written notice of the demolition request to all properties within 150 feet of the site to be demolished, to the recognized organization(s) whose boundaries include the site, to the Architectural Heritage Center/Bosco-Milligan Foundation, Inc., and to the Historic Preservation League of Oregon, dba Restore Oregon. A complete application means when the Bureau of Development Services has received a complete permit application, project plans and the intake, review and notice fees have been paid. The notification letter will contain at least the following information.
  - a. Notice that the site has been proposed for demolition,
  - b. The date the application for demolition was received,
  - c. Notice that there is a demolition delay period of 35 days which may be extended upon request from the recognized organization(s) whose boundaries include the site or an interested party,
  - d. The contact information of the applicant,
  - e. The last day that requests for extended delay may be submitted, and
  - f. The location where more information is available.
2. Posted notice. Not more than 2 weeks nor less than 72 hours before demolition activity commences, the applicant must post door hangers provided by the Bureau of Development Services on all properties within

## **TITLE 24**

### **BUILDING REGULATIONS**

300 feet of the site to be demolished. The notice must contain all of the following information.

- a.** Name and phone number of the Demolition Manager.
  - b.** Notice that the site has been proposed for demolition,
  - c.** The demolition permit number,
  - d.** The approximate date demolition activity will commence,
  - e.** Contact information of the agencies that regulate asbestos and lead-based paint,
  - f.** Contact information for the applicant,
  - g.** Recommended safety information for surrounding properties, such as closing windows and keeping children away from the site, and
  - h.** The location where more information is available.
- E.** 35-day notice period. The building permit for residential demolition will not be issued during the 35-day notice period. The notice period begins on the day the complete permit application is received and all intake fees have been paid. If no written request to extend the demolition delay is received during the 35-day notice period as provided in Subsection 24.55.200 F. below, then the Bureau of Development Services will issue the building permit for demolition.
- F.** Requests for extension of demolition delay period. Requests to extend the demolition delay period may be made as follows:
  - 1.** Who may request. Requests to extend the demolition delay period an additional 60 days may be made by a recognized organization whose boundaries include the site or any other interested party.
  - 2.** How to request. The request to extend the demolition delay period must be made in writing, on forms provided by the Bureau of Development Services. The request must be submitted to the Bureau of Development Services by 4:30 p.m. on the last day of the initial 35-day notice period. The request must be accompanied by an appeal of the demolition permit application submitted to the Bureau for a hearing before the Code Hearings Officer, as provided in Subsection 24.55.200 H. below, along with the appeal fee or a waiver of the fee and a copy of the letter requesting a meeting with the property owner as described in Subsection 24.55.200 H.1. below. A fee waiver will only be granted to recognized organizations whose boundaries include the site.

**TITLE 24**  
**BUILDING REGULATIONS**

- G.** 60-day extension of residential demolition delay period. If a signed request for extension of the demolition delay is received as provided in Subsection 24.55.200 F. above, issuance of the building permit for demolition will be stayed until the Code Hearings Officer has rendered a decision of the appeal filed as provided in Subsection 24.55.200 H. below.
- H.** Appeal of the residential demolition permit application. An interested party may appeal issuance of the demolition permit by completing an appeal application on forms provided by the Bureau. The appeal application must be accompanied by the appeal fee or a fee waiver, along with a copy of the letter requesting a meeting with the property owner as described in Subsection 1. below. Appeals will be forwarded to the Code Hearings Officer and will be governed by the provisions in Chapter 22.10, unless there is a conflict between Chapter 22.10 and this Section, in which case this Section shall apply. The provisions of Chapter 22.03 shall not apply to appeals under this Section, except for Sections 22.03.050 (Hearing Procedure), 22.03.080 (Evidence), and 22.03.110 (Orders). The appeal may be filed any time within the initial 35-day delay period. The demolition permit may not be issued from the time the Bureau receives an appeal application and the fee or fee waiver, until the Code Hearings Officer has rendered a decision or the 60-day extension period has expired. If the fee waiver is denied, the appealing party must submit the appeal fee to the Bureau within three business days of the denial or the appeal will be rejected. The appealing party has the burden of proving that it is actively pursuing an alternative to demolition and must demonstrate all of the following by submitting evidence to the Code Hearings Officer, either with the appeal application or at the appeal hearing:
1. The requesting party has contacted the property owner or property owner's representative to request a meeting to discuss alternatives to demolition by sending a letter to the property owner by registered or certified mail, return receipt requested;
  2. The particular property subject to the demolition permit application has significance to the neighborhood. Evidence of the significance may include, but is not limited to, architectural significance, the age and condition of the structure or other factors;
  3. The requesting party has a plan to save the structure; and
  4. The requesting party has a reasonable potential to consummate the plan within 95 days of the date the Bureau accepted the complete demolition permit application by providing a proposed budget and either evidence of funds on hand or a fund raising plan sufficient to meet the financial requirements of that budget. "Consummate the plan" as used in this Subsection means coming to an agreement among the parties within the 95 days; it does not mean that the plan itself must be completed in that time.

## **TITLE 24**

### **BUILDING REGULATIONS**

- I.** Moving as an alternative. If the applicant decides to move the structure instead of demolishing it, then the demolition notice period and/or extended delay period becomes moot. The demolition delay period is automatically terminated when a building permit to move the structure from the site and a building permit to relocate the structure to another site are issued.
- J.** Findings of the Code Hearings Officer. If the Code Hearings Officer finds that the requesting party has demonstrated that it is actively pursuing an alternative to demolition and has met all of the criteria in Subsection 24.55.200 H. (1. – 4.) above, the Code Hearings Officer may grant an extension of the demolition delay for up to 60 additional days from the date the initial 35 day delay period has expired. If the Code Hearings Officer finds that the requesting party has not met its burden, then the Bureau may issue the demolition permit immediately upon receipt of the decision, provided that all other requirements for issuing the demolition permit have been satisfied.
- K.** End of the extension period. If the Code Hearings Officer has not rendered a decision within the 60-day extension period as provided in Subsections 24.55.200 H. and J. above, the building permit for demolition may be issued any time after 60 days have elapsed since the expiration of the initial 35-day notice period. In no event will the permit issuance be delayed more than 95 days from the date the Bureau received the complete demolition permit application if all other requirements for issuing the demolition permit have been satisfied.
- L.** Exceptions to demolition delay.
  - 1.** The provisions of this Section (24.55.200) do not apply to applications for building permits for demolition that are required by the City to remove structures because of a public hazard, nuisance, or liability. The structure must be subject to a demolition order from the City, or be the subject of enforcement proceedings for demolition and be stipulated by the owner as a dangerous building, in order to be exempt from the demolition delay provisions.
  - 2.** The provisions of this Section (24.55.200) do not apply to applications for building permits for demolition of structures that are subject to the demolition review provisions of Title 33. In this situation, the provisions of Title 33, Planning and Zoning, apply to the application. Any application not subject to the demolition review provisions of Title 33 is subject to the demolition delay provisions of this Section (24.44.200).

#### **24.55.205 Site Control Measures in Residential Demolitions.**

(Added by Ordinance No. 188802; amended by Ordinance No. 189012, effective June 13, 2018.)

**TITLE 24**  
**BUILDING REGULATIONS**

- A.** Scope. The provisions of this Section 24.55.205 apply to demolitions involving the following, regardless of zoning or Comprehensive Plan Map designation:
1. Structures used for residential purposes with four or fewer dwelling units, including mixed use structures. “Mixed use” for purposes of this Section 24.55.205 means the combination on a site of residential uses with commercial or industrial uses.
  2. Any detached accessory structures with a floor area over 200 square feet on a site with a structure covered by Subsection 1. above. “Accessory structure” for purposes of this Section 24.55.205 means a structure not greater than 3,000 square feet in floor area, and not more than two stories in height, the use of which is accessory to and incidental to that of the main structure.
- B.** Documentation Required. A permit to demolish a structure within the scope of this Section as defined in Subsection A. above will not be issued until the Bureau of Development Services (BDS) has received all of the following:
1. A copy of the asbestos survey required under Oregon Revised Statutes 468A.757 and Oregon Administrative Rules Chapter 340, Division 248, as each of these is amended from time-to-time.
  2. If asbestos is identified in the asbestos survey:
    - a. For friable asbestos removal, a copy of the ASN1 (friable notification form) and a close-out letter from the licensed asbestos abatement contractor verifying all of the asbestos identified in the asbestos survey has been abated; and
    - b. For non-friable asbestos removal, a copy of an ASN6 (nonfriable asbestos notification form), and a copy of the ASN4 (asbestos waste shipment form).
  3. A Demolition Plan as described in Section 24.55.150.
  4. If the structure to be demolished was built before January 1, 1978, it will be presumed to contain lead-based paint, unless a copy of lead-test results conducted by an “inspector” or “risk assessor,” as those terms are defined on OAR 333-069 and as that section is amended from time-to-time, that shows the structure does not have lead-containing materials is submitted to the Bureau of Development Services with the application for a demolition permit.

## **TITLE 24**

### **BUILDING REGULATIONS**

5. Unless the lead-test results outlined in Subsection 4. above show that the structure does not have lead-containing materials, if the structure to be demolished was built before January 1, 1978, and the person performing the demolition is a contractor, as defined in ORS 701.005 (5)(a), the person performing the demolition must submit proof to BDS verifying that the person has one of the certifications specified in OAR 333-068-0070, as that section is amended from time-to-time, or has hired a person with one of the specified certifications to perform the mechanical demolition activities or deconstruction on the site.

#### **C. Requirements for Demolitions**

1. Accredited inspector, certified worker, or certified supervisor. An accredited inspector, certified worker, or certified supervisor as those terms are defined in OAR 340-248-0010, must be present during all mechanical demolition activities and deconstruction on the site, unless Comprehensive Asbestos Inspection and Testing, as that term is defined in the BDS administrative rules, has been completed on the structures to be demolished or deconstructed and asbestos test results certified by a licensed asbestos abatement contractor is included with the asbestos survey provided to BDS, along with evidence that all identified asbestos-containing material has been abated as required by the Oregon Department of Environmental Quality.
2. Lead hazard reduction. Prior to commencing mechanical demolition activities, all painted exterior non-structural surfaces, including, but not limited to, doors, windows, railings, soffits, trim, exterior porches (except for concrete or masonry materials), and all layers of siding (unless such surfaces have been tested as set forth in Section B.4. above and found not to contain lead-containing paint) must be removed, and all such materials must be placed in 6 mil plastic and deposited in a covered container. During the removal of these exterior painted materials, 6-mil plastic sheeting or equivalent must be placed at the base of the exterior shear wall and extend at least 10 feet beyond the perimeter of the structure or work area, whichever is greater. If a property line prevents 10 feet of ground covering, vertical containment must be erected to protect neighboring properties.
3. Dust suppression. During mechanical demolition activities, including transfer and loading of materials, the structure, equipment parts that come in direct contact with building materials, and debris must be continuously wetted with a water spray sufficient in volume and force to prohibit airborne emission of dust and particulates from leaving the site. In addition, the entire demolition site and all debris piles must be wetted down each day prior to commencing mechanical demolition activities and at the end of each day during which mechanical demolition activities have occurred.

**TITLE 24**  
**BUILDING REGULATIONS**

4. Wind speed. Mechanical demolition activities must be suspended when winds exceed 25 MPH, verified regularly during mechanical demolition activities by using a hand-held anemometer prior to commencing mechanical demolition activities each day and any time wind speeds noticeably increase. Only deconstruction or other activities that do not generate dust may be conducted on the site when winds exceed 25 MPH.
5. Containment of demolition debris on-site. Containment measures to prevent suspect asbestos-containing material, lead-based paint, and any other pollutants, as defined in the City of Portland Erosion and Sediment Control Manual, from running off the site must be employed consistent with Portland City Code Title 10 and the Solid Waste and Materials Management provisions of the City of Portland Erosion and Sediment Control Manual. If stormwater or any other water generated on the site pools or is collected onsite, including but not limited to water generated from dust suppression activities, then written authorization from the City is required to discharge into a City storm, sanitary, or combined sewer system, unless the Demolition Manager arranges to have the water pumped and hauled off-site for proper disposal. The site will be required to employ approved best management practices, such as settling and filtration, prior to discharge per Portland City Code Subsections 17.34.030 B. and 17.39.040 C.10., and City of Portland Sanitary Discharge and Pretreatment Program Administrative Rules, ENB-4.03(3)(B) and (C).
6. Demolition debris. Any non-salvageable materials and debris generated from demolition activities, including deconstruction, that is deposited into any receptacle, drop box, dumpsters shaft, or piping and any debris left on the site, must be covered at the end of each work day with non-permeable plastic.
7. Exceptions for Full Deconstruction. If the structure to be demolished will be fully deconstructed in accordance with the deconstruction requirements outlined in Portland City Code Subsection 17.106.040 B. and the Portland Deconstruction Administrative Rules adopted October 31, 2016, Parts 4.1 and 4.2, as amended from time-to-time, then the lead hazard reduction requirements in Subsection 2., except the requirement for horizontal and vertical plastic protection; the wetting techniques outlined in Subsection 3., except the requirement to wet mechanically transferred and loaded materials; and the wind restrictions in Subsection 4. above do not apply during deconstruction activities.
8. Exemption for Unsafe or Hazardous Structures. An applicant may request an exemption from the lead hazard reduction requirements in Subsection 2. above if the structure is structurally unsafe or otherwise hazardous to human life to the extent that the activities described in Subsection 2. above could

## **TITLE 24**

### **BUILDING REGULATIONS**

not be safely executed. The request must accompany the application for the demolition permit, unless the unsafe or hazardous condition is not discovered until after the permit application has been submitted. Reasons for exemption consideration could include, but are not limited to, extensive fire damage, drug manufacturing, or severe structural issues that cannot be mitigated without complete mechanical demolition. Request for an unsafe or hazardous structure exemption must be submitted to the Bureau of Development Services and include all of the following:

- a.** A letter on company or organization letterhead from one of the following professionals stating that performing the lead hazard reduction requirements would not be safe:
    - (1)** Structural Engineer licensed in the State of Oregon.
    - (2)** Bureau of Development Services.
    - (3)** Hazardous material professional with credentials to perform work in the State of Oregon.
  - b.** A statement by a professional listed in Subsection a.(1) or (3) above who provides a letter indicating that neither the professional, a relative of the professional, nor a business entity with which the professional is associated has a financial or other interest in the property or project. “Relative” means the spouse, parent, stepparent, child, sibling, step-sibling, son-in-law, or daughter-in-law of the professional.
  - c.** Supporting evidence documenting the condition of the structure and reasons why the lead hazard reduction activities are not recommended due to safety concerns.
- 9.** Notification and Posting. All demolitions that are subject to the provisions of this Section 24.55.205 must comply with the notification requirements in Subsection 24.55.200 D.2. All such sites must also be posted with a sign during demolition activities that meets the requirements of Portland City Code Subsection 10.30.020 B.8.a. and includes the name and telephone number of the Demolition Manager, in addition to the information required in Subsection 10.30.020 B.8.a.

#### **D. Demolition-Related Inspections**

- 1.** BDS will conduct an initial pre-demolition site assessment to determine whether the site control measures outlined in the Demolition Plan, erosion control measures, sediment control measures, and site security are adequate

**TITLE 24**  
**BUILDING REGULATIONS**

based on specific site conditions or other City regulations. The initial site assessment will be used to review the Demolition Plan, including final site grading and any necessary permanent site control measures. In addition, the initial site assessment will ensure that there is a Demolition Manager and that a copy of the Demolition Plan is on site.

2. BDS will conduct an inspection during demolition activities to confirm the Demolition Plan is being properly implemented and maintained during the demolition process, and any dust-suppression and other site control equipment described in the Demolition Plan are on-site.
3. BDS will conduct a post-demolition inspection to verify that site grading has been completed, permanent soil stabilization measures are in place, and the premises is secure as detailed in the Demolition Plan.

**E. Enforcement**

1. Stop Work Orders. When necessary to obtain compliance with this Section 24.55.205, the Director may issue a stop work order as described in Portland City Code Section 3.30.080 requiring that all work, except work directly related to elimination of the violation, be immediately and completely stopped. Any person subject to a stop work order may seek administrative review of the order and may appeal the Director's administrative determination as provided in Portland City Code Section 3.30.080.
2. Citation Process and Fines
  - a. Citation Process
    - (1) Correction Notice. If BDS finds the demolition project does not comply with any provision of this Section 24.55.205, BDS will issue a correction notice stating the provision(s) violated and the required correction(s) to bring the project into compliance.
    - (2) Citation for Violations. If a violation for which a correction notice has been issued is not corrected, or if the same responsible party is found to have violated any provision of this Section 24.55.205 on a different project within the City, BDS may issue a citation to the responsible party for such violation. For the purposes of this Section 24.55.205, the responsible party is defined in Section 24.55.150.
    - (3) Citation service. A citation may be personally delivered to the responsible party, or may be served by Registered or

## **TITLE 24**

### **BUILDING REGULATIONS**

Certified Mail to the responsible party. For purposes of this Subsection, service by Registered or Certified mail is complete and effective when a correctly addressed notice is deposited with the postal service after being either certified or registered by the postal service.

- (4)** Fines and corrections. The citation will state the section of this Section 24.55.205 violated, the fine imposed, and the corrective action required.
- (5)** Corrections not made. If corrections are not made and the violation(s) continue, BDS may impose additional citations or pursue other enforcement remedies as authorized under Portland City Code Section 3.30.040, including assessment of Administrative Enforcement Fees and revocation of issued demolition or building permits.
- (6)** Citation appeals. Issuance of a citation may be appealed by requesting an Administrative Review, see Subsection G below.

- b.** Fines. Fines are established for violations of this Section 24.55.205 as set forth in the Enforcement Fee and Penalty Schedule as adopted by the City Council. These fines will be assessed as a result of an issued citation for violations of this Section 24.55.205 and are in addition to any other fines authorized by law.

1st Offense – a first offense is based on a single inspection, even if there are multiple violations. For any subsequent offenses, a separate fine may be assessed for each violation of this Section 24.55.205.

Additional violations after the first offense will be set at the maximum amount per individual violation allowed by the fee scheduled adopted by the City Council, unless the Director finds mitigating factors that justify a lesser fine. Multiple citations can be issued to the responsible party for continued violations of this Section 24.55.205, and each day of non-compliance may be considered a separate violation.

Fines must be received by the Bureau of Development Services within 15 calendar days of the date on the citation, or within 15 calendar days of the final administrative review of the Director or the published decision of a citation appealed to the Code Hearings Officer, unless the Code Hearings Officer specifies a different date.

**TITLE 24**  
**BUILDING REGULATIONS**

If the citation fine is not paid within 15 calendar days, the fine(s) indicated on the citation will double and the unpaid citation amount may, at the discretion of the Director, be assessed as a City lien against the property.

- F.** Demolition Permit Compliance Prerequisite for New Building Permit. No building permit for a new structure on the site that is subject to the demolition permit (including all lots in a land division or lot confirmation) will be issued until the final inspection for the demolition permit has been completed and approved.
- G.** Administrative Review and Appeals. If a responsible party has received a stop work order or written citation and the responsible party believes the order or citation has been issued in error, the responsible party may request that the order or citation be reviewed by the Director or designee. The responsible party must submit a written request for an Administrative Review within 15 calendar days of the date of the order or citation. An Administrative Review appeal fee, see current BDS Enforcement fee schedule, is due when the written request for an Administrative Review is requested. This fee will only be refunded if it is determined that all of the contested violations were cited in error. A written Administrative Review determination will be served on the responsible party by regular mail.

A responsible party may appeal the written Administrative Review determination to the City Code Hearings Office in accordance with Chapter 22.10 of the Portland City Code.

**24.55.210 Major Residential Alterations and Additions.**

(Added by Ordinance No. 187017; amended by Ordinance No. 189012, effective June 13, 2018.)

- A.** Purpose. The delay provisions are intended to provide notice of a major residential alteration or addition to recognized organizations and to surrounding neighbors. The dust suppression measures are intended to minimize exposure to neighboring properties from dust that may be generated from mechanical demolition activities during major alteration work.
- B.** Where the provisions apply. The major residential alteration and addition delay applies to sites with residential structures that are regulated under the Oregon Residential Specialty Code and that are located in areas with a residential Comprehensive Plan Map designation. If heavy machinery is used in a major alteration project, then the dust suppression measures described in Subsection 24.55.205 C.3. must be implemented during the mechanical demolition activities, as that term is defined in Subsection 24.55.150 H. The delay and dust suppression provisions do not apply to accessory structures such as garages or other outbuildings.

## **TITLE 24**

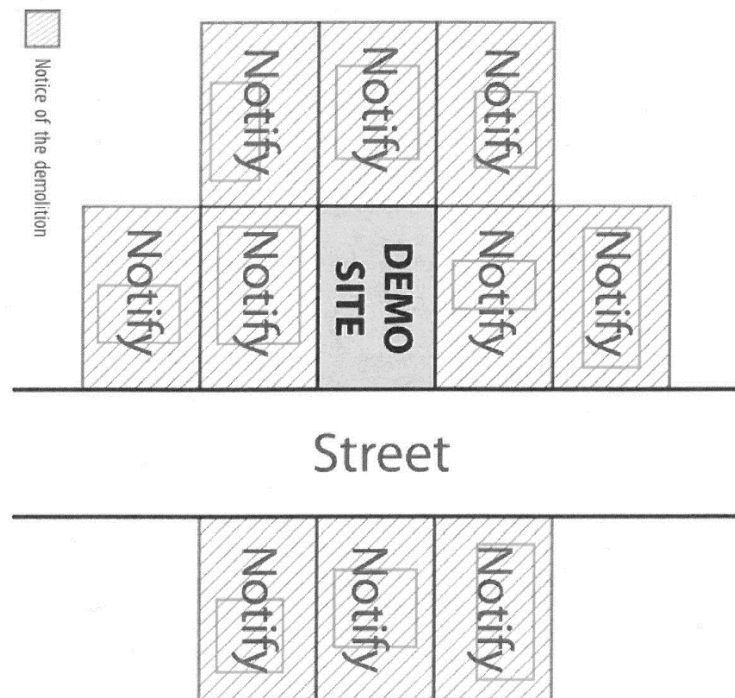
### **BUILDING REGULATIONS**

- C.** Delay in issuing. The building permit for a major residential alteration or addition will not be issued except as provided for in this Section (24.55.210).
- D.** Notification.
  - 1.** Emailed notice. At least 35 days before a building permit is issued for a major residential alteration or addition, the applicant for the permit must email a letter to the recognized organization(s) whose boundaries include the site that contains at least the following information.
    - a.** Notice that an application for a major alteration or addition has been or will be submitted to the Bureau of Development Services,
    - b.** The date the application was filed, if applicable,
    - c.** A general description of the proposed alteration or addition,
    - d.** Notice that there is a delay period of 35 days from the date the notice is sent, and
    - e.** The contact information of the applicant.
  - 2.** Posted notice. At least 35 days before the building permit is issued for the major residential alteration or addition, the applicant must post door hangers provided by the Bureau of Development Services on the 10 surrounding properties from the site of the project. See Figure 210-1 below for a typical configuration. The notice must contain all of the following information.
    - a.** Notice that an application for a major alteration or addition has been or will be submitted to the Bureau of Development Services,
    - b.** The permit application number, if an application has already been filed,
    - c.** The approximate date the construction activity will commence,
    - d.** Contact information of the agencies that regulate asbestos and lead-based paint, and
    - e.** Contact information for the applicant.
- E.** Required information prior to permit issuance. Prior to issuing a major alteration or addition permit, the delay period must expire and the applicant must submit to the Bureau of Development Services:

**TITLE 24**  
**BUILDING REGULATIONS**

1. A copy of the sent email and a list of the names and email addresses of all recognized organizations that received the notification and the date the notifications were emailed, certified by the applicant or the owner or owner's agent, and
  2. A copy of the door hanger and a list of addresses of all properties that received the notification and the date the notifications were posted, certified by the applicant or the owner or owner's agent.
- F.** End of the delay period. The building permit for the major alteration or addition may be issued any time after the end of the 35-day notice period.
- G.** Expiration of permit application. If for any reason, the permit application for a major residential alteration or addition expires prior to issuance of the permit or if an issued permit expires prior to the project being commenced, a new permit application, notification and delay period will be required.

FIGURE 210-1



**24.55.250 Enforcement.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **24.55.300 Referral to the Hearings Officer.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.350 Appeals.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.400 Rehabilitation and Repair under Direction of Council.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.450 Contracts to Repair or Demolish.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.500 Warehousing of Structures.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.550 Interference with Demolition or Repair Prohibited.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.600 Demolition - Debris - Barricades - Nuisances.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.650 Demolition Permits - Investigations.**

(Repealed by Ordinance No. 163608, effective November 7, 1990.)

#### **24.55.700 Demolition Delay - Housing Preservation.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.750 Administrative Review.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.800 Appeals to the Code Hearings Officer.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

#### **24.55.850 Dangerous Building Enforcement Fees.**

(Repealed by Ordinance No. 171455, effective August 29, 1997.)

**TITLE 24**  
**BUILDING REGULATIONS**

**CHAPTER 24.60 - FENCES**

(Chapter amended by Ordinance No. 176585,  
effective July 5, 2002.)

**Sections:**

24.60.020      Barbed Wire Fencing.

**24.60.010      Fences Around Swimming Pools.**

(Repealed by Ordinance No. 180330, effective August 18, 2006.)

**24.60.020      Barbed Wire Fencing.**

(Added by Ordinance No. 176585, effective July 5, 2002.) It is unlawful for any person to construct or maintain a fence containing barbed wire, unless the barbed wire is placed not less than 6 inches above the top of the fence and the fence is not less than 4 feet high.

## **TITLE 24 BUILDING REGULATIONS**

### **CHAPTER 24.65 - SIDEWALK VAULT OPENINGS**

#### **Sections:**

- 24.65.010 Location of Sidewalk Vault Openings.
- 24.65.020 Number of Sidewalk Vault Openings.
- 24.65.030 Sidewalk Elevators.
- 24.65.040 Operation of Sidewalk Elevators.
- 24.65.050 Plans Required.

#### **24.65.010 Location of Sidewalk Vault Openings.**

The outer edge of all openings constructed in sidewalks for fuel, elevators, stairs, or other purposes shall be located not less than 2 feet from the curb line and the inner edge of any sidewalk opening will not be any closer than 3 feet to the property line.

#### **24.65.020 Number of Sidewalk Vault Openings.**

There shall not be more than one opening for each individual building frontage and in no case openings closer than 25 feet to an existing sidewalk opening.

#### **24.65.030 Sidewalk Elevators.**

Openings in sidewalks provided for in Section 24.65.010 shall be supplied with doors attached to a frame built into the sidewalk and shall be capable of supporting a load of 100 pounds per square foot. The door shall be constructed of sheet steel or other approved metal which has an approved non-slip surface. The dimensions of the door in any direction shall not exceed the dimension of the opening by more than 6 inches. The doors and frames shall be so constructed and maintained that there is no projection above or below the sidewalk exceeding 1/4 inch and existing doors which do not conform to the requirements shall be changed to conform within a period of 10 days after notice is given to change the same. Sidewalk doors shall be provided with a metal guard which, when the doors are open, will hold the doors open. This guard shall be located on the side of the sidewalk opening nearest the property line. The guard shall be made in the form of a grating with openings not exceeding 6 inches in dimension and so arranged that a child cannot get under or through the guard. This guard shall not be required for doors having metal gratings which are level with the sidewalk when the doors are open and the elevator platform is below the sidewalk level. Such gratings shall be capable of supporting a load of 100 pounds per square foot. Elevators having these sidewalk gratings shall be provided with a 3/4-inch steel bar to hold the doors open.

#### **24.65.040 Operation of Sidewalk Elevator.**

- A. When not in operation the elevator shall be kept in its down position and the sidewalk doors shall be closed.
- B. When the elevator is being raised, pedestrians shall be warned of the fact by an automatic warning device approved by the Director.

**TITLE 24**  
**BUILDING REGULATIONS**

- C. The sidewalk elevator shall not be raised sooner than 15 minutes prior to a delivery and shall be placed in a down position and the sidewalk doors closed within 15 minutes of the completion of a delivery.

**24.65.050 Plans Required.**

The construction of sidewalk vaults shall be considered as part of a building and plans shall be submitted showing the construction of the same.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.70 – CLEARING, GRADING, AND RETAINING WALLS**

(Chapter amended by Ordinance Nos. 184522,  
185448, 186053 and 188884, effective April 4,  
2018.)

##### **Sections:**

24.70.010	General.
24.70.020	Permits.
24.70.030	Hazards.
24.70.040	Special Definitions.
24.70.050	Information on Plans and in Specifications.
24.70.060	Bonds.
24.70.070	Cuts.
24.70.080	Fills.
24.70.085	Retaining Walls.
24.70.090	Setbacks.
24.70.100	Drainage and Terracing.
24.70.120	Grading Inspection.
24.70.130	Completion of Work.

##### **24.70.010 General.**

(Amended by Ordinance Nos. 165678, 168340, 184522, 185448 and 186053, effective January 1, 2015.) The provisions of this Chapter shall regulate clearing, grading and earthwork construction on private property. Tree removal, whether associated with clearing, grading, earthwork construction or conducted separately shall be regulated pursuant to Title 11, Trees. Erosion control is regulated by Title 10.

##### **24.70.020 Permits.**

(Amended by Ordinance Nos. 165678, 168340 172209, 173532, 173979, 184522, 185448, 186053 and 188884, effective April 4, 2018.) Permits for clearing, grading, and retaining walls are required as specified in this Section. Where a specific activity does not require a clearing or grading permit, a separate tree permit may still be required, as specified in Title 11 Trees. Where a clearing or grading development permit shows trees to be removed and has been reviewed and approved by the City, a separate tree permit is not required in conjunction with the clearing or grading permit. An erosion, sediment and pollutant control plan if required by Title 10 shall be submitted with clearing or grading permit applications. Applicants for permits made in conjunction with land divisions shall be responsible for all clearing, grading, tree removal and erosion control within the land division, even where a specific activity is exempt from an individual permit.

- A.** Clearing Permits. A permit is required and shall be issued in accordance with Section 24.10.070 for clearing activities in the following areas:

**TITLE 24**  
**BUILDING REGULATIONS**

1. The Tualatin River sub-basins, Johnson Creek Basin Plan District, environmental zones, greenway zones, or natural resource management plans; or
  2. Property larger than five acres. Except that no permit shall be required for clearing an area less than 5,000 square feet.
- B.** Grading Permits. A permit is required and shall be issued in accordance with Section 24.10.070 for all grading operations with the exception of the following:
1. Grading in an area, where in the opinion of the Director, there is no apparent danger, adverse drainage, or erosion effect on private/public property, or inspection is not necessary;
  2. An excavation below finished grade for basements and footings of a building, retaining wall, or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than 5 feet after the completion of such structure.
  3. Cemetery graves.
  4. Refuse disposal sites controlled by other regulations.
  5. Excavations for wells or tunnels.
  6. Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate, or clay where established and provided for by law provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.
  7. Exploratory excavations under the direction of soil (geotechnical) engineers or engineering geologists.
  8. An excavation which
    - a. Is less than 2 feet in depth, or
    - b. Which does not create a cut slope greater than 5 feet in height and steeper than 1-1/2 horizontal to 1 vertical.
  9. A fill less than 1 foot in depth, and placed on natural terrain with a slope flatter than 5 horizontal to 1 vertical, or less than 3 feet in depth, not intended to support structures, which does not obstruct a drainage course and which does not exceed 10 cubic yards on any one lot.

## **TITLE 24**

### **BUILDING REGULATIONS**

- C.** Retaining Walls. A permit is required and shall be issued in accordance with Section 24.10.070 for all retaining walls over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, and for retaining walls supporting a surcharge.
- D.** Tree Removal. Removal of trees six-inches and larger in diameter shall be reviewed with the clearing or grading permits as part of the Tree Plan review pursuant to Title 11. When removing 5 or more trees on a site with an average slope of at least 20 percent, applicants shall provide a geotechnical engineering report that assesses the stability of the site after tree felling and root grubbing operations.
- E.** Permits required under this Chapter shall be obtained before the commencement of any tree removal, root grubbing or soil disturbance takes place.

#### **24.70.030 Hazards.**

(Amended by Ordinance Nos. 165678 and 188884, effective April 4, 2018.) The Director may determine that any clearing, grading, retaining wall, or geologic condition on private property has or may become a hazard to life and limb, or endanger property, or cause erosion, or adversely affect drainage or the safety, use or stability of a public way or drainage channel. Upon receipt of notice in writing from the Director, the owner shall mitigate the hazard and be in conformity with the requirements of this Title. The Director may require that plans and specifications and engineering reports be prepared in compliance with this Chapter.

#### **24.70.040 Special Definitions.**

(Amended by Ordinance No. 188884, effective April 4, 2018.) The definitions contained in this Section relate to excavation and grading work only as outlined in this Chapter.

- A.** “Approval” shall mean a written engineering or geological opinion concerning the progress and completion of the work.
- B.** “As graded” is the surface conditions exposed on completion of grading.
- C.** “Bedrock” is in-place solid rock.
- D.** “Bench” is a relatively level step excavated into earth material on which fill is to be placed.
- E.** “Borrow” is earth material acquired from an off-site location for use in grading on a site.
- F.** “Civil engineer” shall mean a professional engineer registered in the State to practice in the field of civil works.

**TITLE 24**  
**BUILDING REGULATIONS**

- G.** “Civil engineering” shall mean the application of the knowledge of the forces of nature, principles of mechanics, and the properties of materials to the evaluation, design, and construction of civil works for the beneficial uses of mankind.
- H.** “Clearing” is the cutting or removal of vegetation which results in exposing any bare soil.
- I.** “Compaction” is the densification of a fill by mechanical means.
- J.** “Earth material” is any rock, natural soil, or fill and/or any combination thereof.
- K.** “Engineering geologist” shall mean a geologist experienced and knowledgeable in engineering geology and registered as an engineering geologist in the State of Oregon.
- L.** “Engineering geology” shall mean the application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.
- M.** “Erosion” is the wearing away of the ground surface as a result of the movement of wind, water, and/or ice.
- N.** “Excavation” is the mechanical removal of earth material.
- O.** “Fill” is a deposit of earth material placed by artificial means.
- P.** “Geological hazard” shall mean a potential or apparent risk to persons or property because of geological or soil instability either existing at the time of construction or which would result from construction.
- Q.** “Grade” shall mean the vertical location of the ground surface.
- R.** “Existing grade” is the grade prior to grading.
- S.** “Rough grade” is the stage at which the grade approximately conforms to the approved plan.
- T.** “Finish grade” is the final grade of the site which conforms to the approved plan.
- U.** “Grading” is any excavating or filling or combination thereof.
- V.** “Key” is a designed compacted fill placed in a trench excavated in earth material beneath the toe of a proposed fill slope.
- W.** “Retaining Wall” is a structure that provides lateral support for a mass of soil or fluid and other imposed loads.

## **TITLE 24**

### **BUILDING REGULATIONS**

- X.** “Site” is any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.
- Y.** “Slope” is an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.
- Z.** “Soil” is naturally occurring surficial deposits overlying bedrock.
- AA.** “Soil (Geotechnical) engineer” shall mean a civil engineer competent by education, training, and experience in the practice of soil engineering.
- BB.** “Soil (Geotechnical) engineering” shall mean the application of the principles of soil mechanics in the investigation, evaluation, and design of civil works involving the use of earth materials and the inspection and testing of the construction thereof.
- CC.** “Terrace” is a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

#### **24.70.050 Information on Plans and in Specifications.**

(Amended by Ordinance Nos. 173532, 184522, 185448, 186053 and 188884, effective April 4, 2018.) Plans and specifications shall be submitted in accordance with Section 24.10.070 and in addition shall comply with the following:

- A.** Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this Title and all relevant laws, ordinances, rules, and regulations. The first sheet of each set of plans shall give the location of the work and the name and address of the owner and the person by whom they were prepared.

The plans shall include the following information.

- 1.** General vicinity of the proposed site.
- 2.** Property limits and accurate contours of existing ground and details of terrain and area drainage for the site and surrounding area.
- 3.** Limiting dimensions, elevations, or finish contours to be achieved by the grading and the proposed drainage channels and related construction.
- 4.** Detailed schedule of when each portion of the site is to be graded; how long the soil is to be exposed; and when the area is to be covered with buildings, paving, new vegetation or temporary erosion control measures.
- 5.** Detailed plans of all surface and subsurface drainage devices, walls, retaining walls, cribbing, dams, and other protective devices to be

**TITLE 24**  
**BUILDING REGULATIONS**

constructed with, or as a part of, the proposed work together with a map showing the drainage area and the estimated runoff of the area served by any drains.

6. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners or trees in the adjacent rights-of-way that are within 15 feet of the property or which may be affected by the proposed grading operations.
7. Specifications shall contain information covering construction and material requirements.
8. Civil engineering report. The civil engineering report, when required by the Director, shall include hydrological calculations of runoff and the existing or required safe storm drainage capacity outlet of channels both on site and off site, and 1 in 100 year flood elevations for any adjacent watercourse. The report shall include recommendations for stormwater control and disposal.
9. Soil (Geotechnical) engineering report. The soil engineering report, when required by the Director, shall include data regarding the nature, distribution, and strength of existing soils, design criteria, and conclusions and recommendations applicable to the proposed development. The report shall include recommendation for subdrainage, and for groundwater control and disposal. Recommendations included in the report and approved by the Director shall be incorporated in the plans and specifications. For single family residences, a surface reconnaissance and stability questionnaire may be substituted for a formal soils report at the discretion of the Director.
10. Engineering geology report. The engineering geology report, when required by the Director, shall include an adequate description of the geology of the site, and conclusions and recommendations regarding the effect of geologic conditions on the proposed development and site(s) to be developed.

Recommendations included in the report and approved by the Director shall be incorporated in the grading plans and specifications.

- B.** Issuance. Section 24.10.070 is applicable to grading permits. The Director may require that:

1. The amount of the site exposed during any one period of time be limited; and

## **TITLE 24**

### **BUILDING REGULATIONS**

- 2.** Grading work be scheduled to avoid weather periods or avoid critical habitat use periods for areas existing on, or adjacent to, the development site.

Subsequent to the issuance of the grading permit, the Director may require that grading operations and project designs be modified if delays occur which can result in weather generated problems not considered at the time the permit was issued.

#### **24.70.060 Bonds.**

The Director may require bonds in such form and amounts as may be deemed necessary to assure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate hazardous conditions.

In lieu of a surety bond the applicant may file a cash bond or instrument of credit with the Director in an amount equal to that which would be required in the surety bond.

#### **24.70.070 Cuts.**

- A.** General. Unless otherwise recommended in the approved soil engineering and/or engineering geology reports, cuts shall conform to the provisions of this Section.
- B.** Slope. The slope of cut surfaces shall be no steeper than is safe for the intended use. Cut slopes shall be no steeper than 2 horizontal to 1 vertical.
- C.** Drainage and terracing. Drainage and terracing shall be provided as required by Section 24.70.100.

#### **24.70.080 Fills.**

- A.** General. Unless otherwise recommended in the approved soil engineering report fills shall conform to the provisions of this Section.

In the absence of an approved soil engineering report these provisions may be waived for minor fills not intended to support structures. Such fills shall be subject to review at the discretion of the Director.

- B.** Ground preparation. The ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, top-soil, and other unsuitable materials scarifying to provide a bond with the new fill, and where slopes are steeper than 5 to 1, and the height greater than 5 feet, by benching into competent material or sound bedrock as determined by the soils engineer. The bench under the toe of a fill on a slope steeper than 5 to 1 shall be at least 10 feet wide. The area beyond the toe of fill shall be sloped for sheet overflow or a paved drain shall be provided. Where fill is to be placed over a cut the bench under the toe of a fill shall be at least 10 feet wide but the cut must be made before placing fill and approved by the soils engineer and engineering geologist as a suitable foundation for fill. Unsuitable soil is soil which in the opinion of the Director or the civil engineer or the soils engineer

or the engineering geologist, is not competent to support either soil or fill, to support structures or to satisfactorily perform the other functions for which the soil is intended.

- C.** Fill material. Only permitted material free from tree stumps, detrimental amounts of organic matter, trash, garbage, sod, peat, and similar materials shall be used. Rocks larger than 6 inches in greatest dimension shall not be used unless the method of placement is properly devised, continuously inspected, and approved by the Director.

The following shall also apply:

- 1.** Rock sizes greater than 6 inches in maximum dimension shall be 10 feet or more below grade, measured vertically.
  - 2.** Rocks shall be placed so as to assure filling all voids with fines. Topsoil may be used in the top 12-inch surface layer to aid in planting and landscaping.
- D.** Compaction of fill. All fills shall be compacted to a minimum relative dry density of 90 percent as determined in accordance with ASTM Standard D-1557-78. Field density verification shall be determined in accordance with ASTM Standard D-1556-82 or equivalent and must be submitted for any fill 12 inches or more in depth where such fill may support the foundation for a structure. A higher relative dry density, or additional compaction tests, or both, may be required at any time by the Director.
- E.** Fill slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes shall be no steeper than 2 horizontal to 1 vertical.
- F.** Drainage and terracing. Drainage and terracing shall be provided and the area above fill slopes and the surfaces of terraces shall be graded and paved as required by Section 24.70.100.

**24.70.085 Retaining Walls.**

(Added by Ordinance No. 188884, effective April 4, 2018.)

- A.** Retaining walls not regulated by the Oregon Residential Specialty Code or the Oregon Structural Specialty Code shall be designed in accordance with ASCE 7-16 and this section.
- B.** Soil loads shall be determined in accordance with ASCE 7-16. Retaining walls in which horizontal movement is restricted at the top shall be designed for at-rest pressure. Retaining walls free to move and rotate at the top shall be permitted to be designed for active pressure. Lateral pressure from surcharge loads shall be

## TITLE 24

### BUILDING REGULATIONS

added to the lateral earth pressure load. Lateral pressure shall be increased if soils at the site are expansive or the retaining wall will support an ascending slope. Retaining walls shall be designed to support the weight of the full hydrostatic pressure of undrained backfill unless a drainage system is installed.

- C. Retaining walls supporting more than 6 feet of backfill height, measured from the base of the footing to the top of the wall, shall incorporate an additional dynamic seismic lateral earth pressure. When the Monobe-okabe method is used to calculate the active dynamic seismic lateral earth pressure, a horizontal acceleration coefficient equal to or greater than one-half (0.5) the design peak horizontal ground acceleration shall be used.
- D. Retaining walls shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed to resist the lateral action of soil to produce sliding and overturning with a minimum safety factor of 1.5 in each case. The load combinations of ASCE 7-16 shall not apply to this requirement. Instead, the design shall be based on 0.7 times nominal earth-quake loads, 1.0 times other nominal loads, and investigation with one or more of the variable loads set to zero. The safety factor against lateral sliding shall be taken as the available soil resistance at the base of the retaining wall foundation divided by the net lateral force applied to the retaining wall.

**Exception:** Where earthquake loads are included, the minimum safety factor for retaining wall sliding and overturning shall be 1.1.

#### 24.70.090 Setbacks.

- A. General. The setbacks and other restrictions specified by this Section are minimal and may be increased by the Director, or by the recommendation of the civil engineer, soils engineer, or engineering geologist, if necessary for safety and stability or to prevent damage of adjacent properties from deposition or erosion or to provide access for slope maintenance and drainage. Retaining walls may be used to reduce the required setbacks when approved by the Director.
- B. Setbacks from property lines. The tops of cuts and toes of fill slopes shall be set back from the outer boundaries of the permit area, including slope right areas and easements, in accordance with Figure No. 2 and Table No. 24.70-C at the end of this Chapter.
- C. Design standards for setbacks. Setbacks between graded slopes (cut or fill) and structures shall be provided in accordance with Figure No. 3 and Table No. 24.70-C at the end of this Chapter.

#### 24.70.100 Drainage and Terracing.

(Amended by Ordinance No. 173270, effective May 21, 1999.)

**TITLE 24**  
**BUILDING REGULATIONS**

- A.** General. Unless otherwise indicated on the approved grading plan, drainage facilities and terracing shall conform to the provisions of this Section.
- B.** Terrace. Terraces at least 6 feet in width shall be established at not more than 30-foot vertical intervals on all cut or fill slopes to control surface drainage and debris except that where only one terrace is required, it shall be at mid-height. For cut or fill slopes greater than 60 feet and up to 120 feet in vertical height one terrace at approximately mid-height shall be 12 feet in width. Terrace widths and spacing for cut and fill slopes greater than 120 feet in height shall be designed by the civil engineer and approved by the Director. Suitable access shall be provided to permit proper cleaning and maintenance.

A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (projected) without discharging into a downdrain.

- C.** Subsurface drainage. Cut and fill slopes shall be provided with subdrainage as necessary for stability. Adequate culverts shall be laid under all fills placed in natural watercourses and along the flow line of any tributary branches in such a manner that the hydraulic characteristics of the stream are not adversely altered. In addition, subdrainage shall be installed if active or potential springs or seeps are covered by the fill. All culverts/subdrainage shall be installed after the suitable subgrade preparation. Design details of culverts/subdrainage shall be shown on each plan and be subject to the approval of the Director and of other government/private agencies as may be required.

A subdrain system shall be provided for embedded foundation/ retaining walls and floor slabs where ground water or seepage has a potential to affect the performance of the structure. The plans shall indicate

1. subdrainage details with appropriate specifications,
2. location of footing subdrain/discharge lines and,
3. method of disposal.

In lieu of above, walls/floors may be waterproofed and designed to resist hydrostatic pressure.

- D.** Disposal. All drainage facilities shall be designed to carry waters to the nearest practicable drainageway or approved stormwater management facility, as approved by the Director and/or other appropriate jurisdiction as a safe place to deposit such waters. Erosion of ground in the area of discharge shall be prevented by installation of non-erosive downdrains or other devices.

## **TITLE 24**

### **BUILDING REGULATIONS**

Building pads shall have a drainage gradient of 2 percent toward approved drainage facilities, unless waived by the Director.

Exception: The gradient from the building pad may be 1 percent if all of the following conditions exist throughout the permit area:

1. No proposed fills are greater than 10 feet in maximum depth.
  2. No proposed finish cut or fill slope faces have a vertical line in excess of 10 feet.
  3. No existing slope faces, which have a slope face steeper than 10 horizontal to 1 vertical, have a vertical height in excess of 10 feet.
- E.** Interceptor drains. Paved interceptor drains shall be installed along the top of all cut slopes where the tributary drainage area above slopes towards the cut and has a drainage path greater than 40 feet measured horizontally. Interceptor drains shall be paved with a minimum of 3 inches of concrete or gunite and reinforced. They shall have a minimum depth of 12 inches and a minimum paved width of 30 inches measured horizontally across the drain. The slope of the drain shall be approved by the Director.

#### **24.70.110 Erosion Control.**

(Repealed by Ordinance No. 173979, effective March 1, 2000.)

#### **24.70.120 Grading Inspection.**

(Amended by Ordinance No. 188647, effective November 17, 2017.)

- A.** General. All grading operations for which a permit is required shall be subject to inspection by the Director. When required by the Director, special inspection of grading operations and special testing shall be performed in accordance with the provisions of Section 24.70.120 C.
- B.** Grading designation. All grading in excess of 5,000 cubic yards shall be performed in accordance with the approved grading plan prepared by a civil engineer and shall be designated as “engineered grading.” Grading involving less than 5,000 cubic yards may also be designated as “engineered grading” by the Director if the grading will
1. support a building or structure of a permanent nature;
  2. support other engineering works such as, but not limited to, tanks, towers, machinery, retaining wall, and paving;
  3. be deemed a potential hazard under Section 24.70.030. The permittee with the approval of the Director may also choose to have the grading performed

as “engineered grading.” Otherwise, the grading shall be designated as “regular grading.”

- C.** Engineered grading requirements. For engineered grading, it shall be the responsibility of the civil engineer who prepares the approved grading plan to incorporate all recommendations from the soil engineering and engineering geology reports into the grading plan. The civil engineer shall also be responsible for the professional inspection and approval of the grading within the civil engineer’s area of technical specialty. This responsibility shall include, but need not be limited to, inspection and approval as to the establishment of line, grade, and drainage of the development area. The civil engineer shall act as the coordinating agent in the event that need arises for liaison between the other professionals, the contractor, and the Director. The civil engineer shall also be responsible for the preparation of revised plans and the submission of as-graded grading plans upon completion of the work. The grading contractor shall submit in a form prescribed by the Director a statement of compliance to said as-graded plan.

Soil engineering and engineering geology reports shall be required as specified in Section 24.70.050. During grading all necessary reports, compaction data, and soil engineering and engineering geology recommendations shall be submitted to the civil engineer and the Director by the soil engineer and the engineering geologist. The soil engineer’s area of responsibility shall include, but need not be limited to, the professional inspection and approval concerning the preparation of ground to receive fills, testing for required compaction, stability of all finish slopes, and the design of buttress fills, where required, incorporating data supplied by the engineering geologist.

The engineering geologist’s area of responsibility shall include, but need not be limited to, professional inspection and approval of the adequacy of natural ground for receiving fills and the stability of cut slopes with respect to geological matters, and the need for subdrains or other ground water drainage devices. The engineering geologist shall report the findings to the soil engineer and the civil engineer for engineering analysis.

The Director shall inspect the project at the various stages of work requiring approval and at more frequent intervals necessary to determine that adequate control is being exercised by the professional consultants.

- D.** Regular grading requirements. The Director may require inspection and testing by an approved testing agency. The testing agency’s responsibility shall include, but need not be limited to, approval concerning the inspection of cleared areas and benches to receive fill, and the compaction of fills. When the Director has cause to believe that geological factors may be involved the grading operation will be required to conform to “engineered grading” requirements.

## **TITLE 24**

### **BUILDING REGULATIONS**

- E.** Notification of noncompliance. If, in the course of fulfilling their responsibility under this Chapter, the civil engineer, the soil engineer, the engineering geologist, or the testing agency finds that the work is not being done in conformity with this Chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the person in charge of the grading work and to the Director. Recommendations for corrective measures, if necessary, shall be submitted.
- F.** Transfer of responsibility for approval. If the civil engineer, the soil engineer, the engineering geologist, or the testing agency of record are changed during the course of the work, the work shall be stopped until the replacement has agreed to accept the responsibility within the area of their technical competence for approval upon completion of the work.

#### **24.70.130 Completion of Work.**

(Amended by Ordinance No. 188647, effective November 17, 2017.)

- A.** Final reports. Upon completion of the rough grading work and that final completion of the work the Director may require the following reports and drawings and supplements thereto:

  - 1.** An as-graded grading plan prepared by the civil engineer including original ground surface elevations, as-graded ground surface elevations, lot drainage patterns, and locations and elevations of all surface and sub-surface drainage facilities. The civil engineer shall provide approval that the work was done in accordance with the final approved grading plan.
  - 2.** A Soil Grading Report prepared by the soil engineer including locations and elevations of field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading and their effect on the recommendations made in the soil engineering investigation report. The soil engineer shall provide approval as to the adequacy of the site for the intended use.
  - 3.** A Geological Grading Report prepared by the engineering geologist including a final description of the geology of the site including any new information disclosed during the grading and the effect of same on recommendations incorporated in the approved grading plan. The engineering geologist shall provide approval as to the adequacy of the site for the intended use as affected by geological factors.
- B.** Notification of completion. The permittee or his agent shall notify the Director when the grading operation is ready for final inspection. Final approval shall not be given until all work including installation of all drainage facilities and their protective devices and all erosion control measures have been completed in

**TITLE 24**  
**BUILDING REGULATIONS**

accordance with the final approved grading plan and the required reports have been submitted.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.75 - UNIFORM BUILDING ADDRESS SYSTEM**

(Chapter added by Ordinance No. 161984, effective  
July 1, 1989.)

##### **Sections:**

- 24.75.010 Uniform System.
- 24.75.020 Size and Location of Building Numbers.
- 24.75.030 Administration.
- 24.75.040 Owner Responsibility.
- 24.75.050 Alteration of Building Number - Improper Number.
- 24.75.060 Building Defined.
- 24.75.070 Enforcement.

##### **24.75.010 Uniform System.**

(Amended by Ordinance No. 188995, effective July 6, 2018.)

- A.** There is established a uniform system of numbering all buildings in separate ownership or occupancy in the City dividing the City into six addressing districts. In establishing the system Williams Avenue, Naito Parkway, View Point Terrace and Tryon Creek State Natural Area and the centerline of the Willamette River southerly from Oregon Street and northerly from Clay Street, shall constitute the north and south base line from which the numbers on all buildings running easterly and westerly from said streets shall be extended each way, upon the basis of one number for each ten feet of property frontage, wherever possible, starting at the base line with the number 1 continuing with consecutive hundreds at each intersection, wherever possible.
- B.** All even numbers shall be placed upon buildings on the southerly side of streets, avenues, alleys and highways, and all odd numbers shall be placed upon buildings on the northerly side of streets, avenues, alleys and highways. Burnside Street shall constitute the east and west base line from which the numbers on all streets running north and south from said streets shall be extended each way, upon the basis of one number for each 10 feet of property frontage, wherever possible, starting at the base line with number 1 and continuing with consecutive hundreds at each intersection, wherever possible. All even numbers shall be placed upon buildings on the easterly side of streets, avenues, alleys, and highways, and all odd numbers upon buildings on the westerly side of said streets, avenues, alleys, and highways. Freestanding buildings on private streets which are separately owned or occupied shall be separately numbered so as to most closely conform to this system. Each portion of a building which is separately owned or occupied and has a separate entrance from the outside shall have a separate number assigned to it.

- C. Suffixes to Building Numbers. Where building address requirements exceed numbers available within the numbering system, the Director may use the suffix “A”, “B”, “C”, etc. as may be required to provide the numbering required by this Chapter.

**24.75.020 Size and Location of Building Numbers.**

All numbers placed in accordance with this Chapter shall be permanently affixed to a permanent structure and of sufficient size and so placed as to be distinctly legible from the public way providing primary access to the building. All numbers shall be posted as nearly as possible in a uniform place and positioned on the front of each building near the front entrance. Where outside illumination is provided, the numbers shall be placed so as to be illuminated by the outside light. In instances where building mounted numbers are not distinctly visible from a public way, a duplicate set of numbers shall be permanently affixed to a permanent structure at the primary entranceway to such property. If, in the judgment of the Director, the numbering, sequence, legibility, size or location does not meet the requirements as set forth above, the property owner or agent therefor shall be notified and within 30 days shall make such changes as required in the notification.

**24.75.030 Administration.**

The Director shall assign address numbers, keep records of address assignments, and exercise such other powers as are necessary to carry out the provisions of this Chapter.

**24.75.040 Owner Responsibility.**

Whenever any new building is erected, modified, or occupied in a manner requiring an address assignment, the owner or owner’s agent shall procure the correct address number or numbers designated by the Director and pay required fees.

The owner or agent shall prior to occupancy or within 30 days of assignment, whichever occurs later, place the assigned address number(s) upon the building or in a manner and location as provided in this Chapter.

**24.75.050 Alteration of Building Number - Improper Number.**

It is unlawful for any person to cause or knowingly permit a building number to be displayed which is different than that assigned pursuant to this Chapter. It is unlawful for any person to own or have possession of a building which does not display the number assigned pursuant to this Chapter in the manner provided by this Chapter.

**24.75.060 Building Defined.**

As used in this Chapter, “building” is any structure used or intended for supporting or sheltering any use or occupancy.

**24.75.070 Enforcement.**

The Director shall provide written notices to the owner of any building in violation of the provisions of this Title. The notice shall state the violations existing and specify the owner has 30 days to obtain compliance.

**TITLE 24**  
**BUILDING REGULATIONS**

In the event the owner fails or neglects to comply with the violation notice in the prescribed time the Director may gain compliance by:

- A.** Instituting an action before the Code Enforcement Hearings Officer as provided in Title 22 of the City Code, or
- B.** Causing appropriate action to be instituted in a court of competent jurisdiction, or
- C.** Taking such other action as the Director deems appropriate.

**TITLE 24**  
**BUILDING REGULATIONS**

**CHAPTER 24.80 - DERELICT COMMERCIAL  
BUILDINGS**

(Chapter repealed by Ordinance No. 171455,  
effective August 29, 1997.)

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **CHAPTER 24.85 - SEISMIC DESIGN REQUIREMENTS FOR EXISTING BUILDINGS**

(Chapter added by Ordinance No. 168627, effective  
March 22, 1995.)

##### **Sections:**

24.85.010	Scope.
24.85.015	Structural Design Meeting.
24.85.020	Seismic Related Definitions.
24.85.030	Seismic Improvement Standards.
24.85.040	Change of Occupancy or Use.
24.85.050	Building Additions or Structural Alterations.
24.85.051	Mezzanine Additions.
24.85.055	Structural Systems Damaged by Catastrophic Events.
24.85.056	Structural Systems Damaged by an Earthquake.
24.85.060	Required Seismic Evaluation
24.85.065	Seismic Strengthening of Unreinforced Masonry Bearing Wall Buildings.
24.85.067	Voluntary Seismic Strengthening.
24.85.070	Phasing of Improvements.
24.85.075	Egress Through Existing Buildings.
24.85.080	Application of Other Requirements.
24.85.090	Fee Reductions.
24.85.095	Appeals.

##### **24.85.010 Scope.**

(Amended by Ordinance Nos. 178831 and 189201, effective November 9, 2018.)

- A.** The provisions of this chapter prescribe the seismic design requirements for existing buildings undergoing changes of occupancy, additions, alterations, catastrophic damage, fire, or earthquake repair, or mandatory or voluntary seismic strengthening. Except for the provisions related to seismic strengthening of unreinforced masonry bearing wall buildings in Section 24.85.065, the requirements of this chapter only apply to buildings for which a building permit has been applied for to change the occupancy classification, add square footage to the building, alter or repair the building.
- B.** Under the authority provided by State law, the provisions of this chapter prescribing seismic rehabilitation standards for existing buildings can be used in lieu of meeting the requirements of the current edition of the State of Oregon Structural Specialty Code.

**24.85.015 Structural Design Meeting.**

(Added by Ordinance No. 178831, effective November 20, 2004.) Upon request, BDS engineering staff is available to meet with an owners design engineer to review proposed seismic strengthening plans in a pre-design meeting. A written record of the meeting discussion and determinations will be placed in the permit record.

**24.85.020 Seismic Related Definitions.**

(Amended by Ordinance Nos. 169427, 170997, 178831, 180917, 187192 and 189201, effective November 9, 2018.) The definitions contained in this Section relate to seismic design requirements for existing buildings outlined in this Chapter.

- A. ASCE 41 means the Seismic Evaluation and Retrofit of Existing Buildings ASCE/SEI 41-13 published by the American Society of Civil Engineers and the Structural Engineering Institute.
- B. ASCE 41 Evaluation means the process of evaluating an existing building for the potential earthquake-related risk to human life posed by that building, or building component, and the documentation of that evaluation, performed and written according to the provisions of ASCE 41. Tier 1 and Tier 2 deficiency based evaluation for both structural and non-structural components using the Basic Performance Objective for Existing Buildings (BPOE) as defined in ASCE 41 shall be the performance objective for the evaluation, unless a Tier 3 evaluation is required by ASCE 41
- C. ASCE 41-BPOE Improvement Standard means the Tier 1 and Tier 2 Deficiency based retrofit for both structural and non-structural components using the Basic Performance Objective for Existing Buildings (BPOE) as defined in ASCE 41, unless a Tier 3 evaluation is required by ASCE 41.
- D. ASCE 41-BPON Improvement Standard means Tier 3 Retrofit for both structural and non-structural components using the Basic Performance Objective Equivalent to New Buildings (BPON) as defined in ASCE 41.
- E. ATC 20 means the latest Edition of the manual on “Procedures for Post Earthquake Safety Evaluation of Buildings” published by Applied Technology Council.
- F. BDS means the City of Portland’s Bureau of Development Services.
- G. BPOE- Basic Performance Objective for Existing Buildings: A series of defined Performance Objectives based on a building’s Risk Category meant for evaluation and retrofit of existing buildings; See Table 2-1 of ASCE 41.
- H. BPON- Basic Performance Objective Equivalent to New Building Standards: A series of defined Performance Objectives based on a building’s Risk Category meant for evaluation and retrofit of existing buildings to achieve a level of

## **TITLE 24**

### **BUILDING REGULATIONS**

performance commensurate with the intended performance of buildings designed to a standard for new construction; See Table 2-2 of ASCE 41.

- I.** BSE-1E: Basic Safety Earthquake-1 for use with the Basic Performance Objective for Existing Buildings, taken as a seismic hazard with a 20 percent probability of exceedance in 50 years, except that the design spectral response acceleration parameters  $S_x$ s and  $S_x1$  for BSE-1E seismic hazard level shall not be taken as less than 75 percent of the respective design spectra response acceleration parameters obtained from BSE-1N seismic hazard level and need not be greater than BSE-2N at a site.
- J.** BSE-1N: Basic Safety Earthquake-1 for use with the Basic Performance Objective Equivalent to New Buildings Standards, taken as two-thirds of the BSE- 2N.
- K.** BSE-2E: Basic Safety Earthquake-2 for use with the Basic Performance Objective for Existing Buildings, taken as a seismic hazard with a 5 percent probability of exceedance in 50 years, except that the design spectral response acceleration parameters of  $S_x$ s and  $S_x1$  for BSE-2E seismic hazard level shall not be taken as less than 75 percent of the respective design spectra response acceleration parameters obtained from BSE- 2N Seismic hazard level and may not be greater than BSE-2N at a site.
- L.** BSE-2N: Basic Safety Earthquake-2 for use with the Basic Performance Objective Equivalent to New Buildings Standards, taken as the ground shaking based on Risk-Targeted Maximum Considered Earthquake (MCER) per ASCE 7 at a site.
- M.** Building Addition means an extension or increase in floor area or height of a building or structure.
- N.** Building Alteration means any change, addition or modification in construction.
- O.** Catastrophic Damage means damage to a building that causes an unsafe structural condition from fire, vehicle collision, explosion, or other events of similar nature.
- P.** Essential Facility has the same meaning as defined in the OSSC.
- Q.** FM 41 Agreement means a joint agreement between Portland Fire & Rescue, the Bureau of Development Services and a building owner to schedule improvements to the building following a determination of the fire and life safety hazards posed by the existing condition of the building as provided under Oregon law.
- R.** Live/Work Space means a combination working space and dwelling unit. A live/work space includes a room or suite of rooms on one or more floors designed for and occupied by not more than one family and including adequate working space reserved for the resident's occupancy. A live/work space is individually

**TITLE 24**  
**BUILDING REGULATIONS**

equipped with an enclosed bathroom containing a lavatory, water closet, shower/and or bathtub and appropriate venting.

- S. Net Floor Area means the entire area of a structurally independent building, including an occupied basement, measured from the inside of the permanent outer building walls, excluding any major vertical penetrations of the floor, such as elevator and mechanical shafts.
- T. Non-profit building means a building owned by an organization registered as a non-profit entity with the Oregon Secretary of State.
- U. Occupant Load means the number of persons for which the means of egress of a building or portion thereof is designed. The occupant load shall be calculated based on occupant load factors in the table assigned to each space in the Oregon Structural Specialty Code (OSSC).
- V. Oregon Structural Specialty Code (OSSC) means the provisions of the State of Oregon Structural Specialty Code as adopted by Section 24.10.040 A.
- W. Publicly-owned building means a building owned by a government agency, including a federal, state, or local government, or a special district.
- X. Reinforced Masonry means masonry having both vertical and horizontal reinforcement as follows:
  - 1. Vertical reinforcement of at least 0.20 in<sup>2</sup> in cross-section at each corner or end, at each side of each opening, and at a maximum spacing of 4 feet throughout. One or two story buildings may have vertical reinforcing spaced at greater than 4 feet throughout provided that a rational engineering analysis is submitted which shows that existing reinforcing and spacing provides adequate resistance to all required design forces without net tension occurring in the wall.
  - 2. Horizontal reinforcement of at least 0.20 in<sup>2</sup> in cross-section at the top of the wall, at the top and bottom of wall openings, at structurally connected roof and floor openings, and at a maximum spacing of 10 feet throughout.
  - 3. The sum of the areas of horizontal and vertical reinforcement shall be at least 0.0005 times the gross cross-sectional area of the element.
  - 4. The minimum area of reinforcement in either direction shall not be less than 0.000175 times the gross cross-sectional area of the element.
- Y. Risk Category: A categorization of a building for determination of earthquake performance based on Oregon Structural Specialty Code (OSSC).

## TITLE 24

### BUILDING REGULATIONS

- Z.** Roof Covering Repair or Replacement means the installation of a new roof covering following the removal of an area of the building's roof covering exceeding 50 percent or more of the total roof area within the previous 15 year period.
- AA.** Unreinforced Masonry (URM) means adobe, burned clay, concrete or sand-lime brick, hollow clay or concrete block, hollow clay tile, rubble and cut stone and unburned clay masonry that does not satisfy the definition of reinforced masonry as defined herein. Plain unreinforced concrete shall not be considered unreinforced masonry for the purpose of this Chapter.
- BB.** Unreinforced Masonry Bearing Wall means a URM wall that provides vertical support for a floor or roof for which the total superimposed vertical load exceeds 100 pounds per lineal foot of wall.
- CC.** Unreinforced Masonry Bearing Wall Building means a building that contains at least one URM bearing wall.

#### 24.85.030 Seismic Improvement Standards.

(Amended by Ordinance Nos. 170997 and 178831, effective November 20, 2004.) For changes of occupancy structural additions, building alterations and catastrophic or earthquake damage repair, the design standard shall be the current edition of the OSSC unless otherwise noted by this Chapter.

#### 24.85.040 Change of Occupancy or Use.

(Amended by Ordinance Nos. 169905, 170997, 178831, 187192 and 189201, effective November 9, 2018.) The following table shall be used to classify the relative hazard of all building occupancies:

TABLE 24.85-A		
Relative Hazard Classification	OSSC Occupancy Classification	Seismic Improvement Standard
5 (Highest)	A, E, I-2, I-3, H-1, H-2, H-3, H-4, H-5	OSSC or ASCE 41-BPON
4	R-1, R-2, SR, I-1, I-4	
3	B, M	41-BPOE
2	F-1, F-2, S-1, S-2	
1 (Lowest)	R-3, U	

- A.** Occupancy Change to a Higher Relative Hazard Classification. An occupancy change to a higher relative hazard classification will require seismic improvements based upon the factors of changes in the net floor area and the occupant load increases as indicated in Table 24.85-B below. All improvements to either the

**TITLE 24**  
**BUILDING REGULATIONS**

OSSC or ASCE 41 improvement standard shall be made such that the entire building conforms to the appropriate standard indicated in Table 24.85-B.

<b>TABLE 24.85-B</b>				
<b>Percentage of Building Net Floor Area Changed</b>		<b>Occupant Load Increase</b>	<b>Required Improvement Standard</b>	<b>Relative Hazard Classification</b>
1/3 of area or less	and	Less than 150	None	1 through 5
More than 1/3 of area	or	150 and above	ASCE 41-BPOE	1, 2, and 3
More than 1/3 of area	or	150 and above	OSSC or ASCE 41-BPON	4 and 5

Multiple occupancy changes to a single building may be made under this section without triggering a seismic upgrade provided the cumulative changes do not exceed 1/3 of the building net floor area or add more than 149 occupants with respect to the legal building occupancy as of October 1, 2004.

- B.** Occupancy Change to Same or Lower Relative Hazard Classification. An occupancy change to the same or a lower relative hazard classification or a change in use within any occupancy classification will require seismic improvements using either the OSSC or ASCE 41 improvement standard, as identified in Table 24.85-A above, where the change results in an increase in occupant load of more than 149 people as defined by the OSSC. Where seismic improvement is required, the entire building shall be improved to conform to the appropriate improvement standard identified in Table 24.85-A.

Multiple occupancy changes to a single building may be made under this section without triggering a seismic upgrade provided the cumulative changes do not result in the addition of more than 149 occupants with respect to the legal building occupancy as of October 1, 2004.

- C.** Occupancy Change to Live Work Space. Any building occupancy classified as relative hazard category 1, 2, or 3 may undergo a change of occupancy to live/work space provided that:
- 1.** The building shall be improved such that the entire building conforms to the ASCE 41-BPOE improvement standard; and
  - 2.** The building meets the fire and life safety standards of the current OSSC.

## **TITLE 24**

### **BUILDING REGULATIONS**

3. Any Unreinforced Masonry bearing wall building converted to live/work space, regardless of construction costs, shall be improved such that the entire building conforms to the ASCE 41-BPOE improvement standard.
- D. Occupancy Change to Essential Facilities. All structures which are being converted to essential facilities, as defined in the OSSC, shall comply with current state code seismic requirements or ASCE 41-BPON improvement standard, regardless of other requirements in this section.

#### **24.85.050 Building Additions or Structural Alterations.**

(Amended by Ordinance Nos. 178831 and 187192, effective July 17, 2015.) An addition that is not structurally independent from an existing building shall be designed and constructed such that the entire building conforms to the seismic force resistance requirements for new buildings unless the following two conditions listed below are met. Furthermore, structural alterations to an existing building or its structural elements shall also meet the following two conditions:

- A. The addition or structural alteration shall comply with the requirements for new buildings; and
- B. Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition(s) or structural alteration(s) considered is no more than 10 percent greater than its demand-capacity ratio with the addition(s) or structural alteration(s) ignored shall be permitted to remain unaltered. For purposes of this paragraph, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of additions and structural alterations since original construction.

#### **24.85.051 Mezzanine Additions.**

(Added by Ordinance No. 178831, effective November 20, 2004.) A mezzanine addition shall not require seismic strengthening of the entire building when all of the following conditions are met:

- A. Entire building strengthening is not required by any other provision contained in this Title;
- B. The net floor area of the of the proposed mezzanine addition is less than 1/3 of the net floor area of the building;
- C. The mezzanine addition does not result in an occupant load increase, as defined by the OSSC, of more than 149 people; and
- D. Subsections 24.85.050 A. - C. shall also apply to mezzanine additions.

**24.85.055 Structural Systems Damaged by Catastrophic Events.**

(Added by Ordinance No. 170997; amended by Ordinance Nos. 178831 and 187192, effective July 17, 2015.)

- A.** Building Lateral Load Resisting systems along any principal axis damaged less than or equal to 50 percent.

  - 1.** If a building is damaged by a catastrophic event such that less than or equal to 50 percent of the capacity of the existing lateral load resisting system along any principal axis of the building are damaged, only the damaged lateral load resisting components of the building's structural system must be designed and constructed to current provisions of the OSSC. These components must also be connected to the balance of the undamaged lateral load resisting system in conformance with current code provisions. Undamaged components need not be upgraded to current lateral load provisions of the current code, unless required by other provisions of this title.
  - 2.** New lateral system vertical elements must be compatible with any existing lateral system elements, including foundations. In multistory buildings, the engineer shall confirm that the new lateral system vertical elements do not introduce soft or weak story seismic deficiencies, as defined by ASCE 41, where they did not previously exist, or make existing conditions more hazardous.
- B.** Building Lateral Load Resisting systems along any principal axis damaged more than 50 percent. Where a building is damaged by a catastrophic event such that more than 50 percent of the capacity of the existing lateral load resisting system along any principal axis of the building is damaged, all lateral load resisting components of the entire building's structural system along that principal axis must be designed and constructed to the current provisions of the OSSC or ASCE 41-BPON improvement standard.

**24.85.056 Structural Systems Damaged by an Earthquake.**

(Added by Ordinance No. 178831; amended by Ordinance No. 187192, effective July 17, 2015.) As a result of an earthquake, the Director may determine through either an ATC 20 procedure or through subsequent discovery any structure or portion thereof to be in an unsafe condition as defined by State law. As a result of making this determination, the Director may declare the structure or portion thereof to be a public nuisance and to be repaired or rehabilitation as provided in Subsections 24.85.056 A.-C., or abated by demolition or removal in accordance with Title 29. For the purposes of this Section, an "unsafe condition" includes, but is not limited to any portion, member or appurtenance of a building that has become detached or dislodged or appears likely to fail or collapse and thereby injure persons or damage property; or any portion of a building or structure that

## **TITLE 24**

### **BUILDING REGULATIONS**

has been damaged to the extent that the structural strength or stability of the building is substantially less than it was prior to the damaging event.

- A.** Buildings built prior to January 1, 1974 with lateral support systems that have unsafe conditions shall be repaired or improved to resist seismic forces such that the repaired lateral system conforms to the ASCE 41-BPOE improvement standard.
  - 1.** Where less than 50 percent of the lateral support system has been damaged, only the damaged elements must be repaired.
  - 2.** Where 50 percent or more of the lateral support system has been damaged, then the entire lateral support system must be repaired to resist seismic forces such that the repaired system conforms to the ASCE 41-BPOE improvement standard.
- B.** Buildings built on or after January 1, 1974 with lateral support systems that have unsafe conditions shall be repaired or improved to resist seismic forces such that the repaired lateral system conforms to the code to which the building was originally designed, but not less than that required to conform to the ASCE 41-BPOE improvement standard.
  - 1.** Where less than 50 percent of the lateral support system has been damaged, only the damaged elements must be repaired.
  - 2.** Where 50 percent or more of the lateral support system has been damaged, then the entire lateral support system must be repaired to resist seismic forces such that the repaired system conforms to the code to which the building was originally designed, but not less than that required to conform to the ASCE 41-BPOE improvement standard.
- C.** New lateral system vertical elements must be compatible with any existing lateral system elements, including foundations. In multistory buildings, the engineer shall confirm that the new lateral system vertical elements do not introduce soft or weak story seismic deficiencies, as defined by ASCE 41, where they did not previously exist, or make existing conditions more hazardous.

#### **24.85.060 Required Seismic Evaluation.**

(Added by Ordinance No. 169427; amended by Ordinance Nos. 178831 and 187192, effective July 17, 2015). When an alteration for which a building permit is required has a value (not including costs of mechanical, electrical, plumbing, permanent equipment, painting, fire extinguishing systems, site improvements, eco-roofs and finish works) of more than \$175,000, an ASCE 41 evaluation is required. This value of \$175,000 shall be modified each year after 2004 by the percent change in the R.S Means Construction Index for Portland on file with the Director. A letter of intent to have an ASCE 41 evaluation performed may be submitted along with the permit application. The evaluation must be

**TITLE 24**  
**BUILDING REGULATIONS**

completed before any future permits will be issued. The following shall be exempted from this requirement:

- A.** Buildings constructed or renovated to seismic zone 2, 2b or 3 under a permit issued after January 1, 1974.
- B.** Detached One- and two-family dwellings, and their accessory structures.
- C.** Single story, light frame metal and light wood frame buildings, not more than 20 feet in height from the top surface of the lowest floor to the highest interior overhead finish and ground area of 4,000 square feet or less.

A previously prepared seismic study may be submitted for consideration by the Director as equivalent to an ASCE 41 evaluation.

**24.85.065 Seismic Strengthening of Unreinforced Masonry Bearing Wall Buildings.**

(Added by Ordinance No. 169427; amended by Ordinance Nos. 170997, 178831, 187192 and 189201, effective November 9, 2018). When any building alterations or repairs occur at an Unreinforced Masonry Bearing Wall Building, all seismic hazards shall be mitigated as set forth in Subsections 24.85.065 A. and B. A previously permitted seismic strengthening scheme designed in accordance with FEMA 178/310/ASCE 31 may be submitted for consideration by the Bureau Director as equivalent to the ASCE 41 improvement standard.

- A.** Roof Repair or Replacement. When a roof covering is repaired or replaced, as defined in 24.85.020, the building structural roof system, anchorage, and parapets shall be repaired or rehabilitated such that, at a minimum, the wall anchorage for both in-plane and out-of-plane forces at the roof and parapet bracing conform to the ASCE 41-BPOE improvement standard. In-plane brick shear tests are not required as part of the ASCE evaluation under this subsection.
- B.** Additional Triggers.

- 1.** Building alterations or repair. When the cost of alteration or repair work which requires a building permit exceeds the following criteria, then the building shall be improved to resist seismic forces such that the entire building conforms to the ASCE 41-BPOE improvement standard.

<b>Table 24.85-C</b>		
<b>Building Description</b>	<b>Cost of Alteration or Repair in a 5-Year Period</b>	<b>Cost of Alteration or Repair in a 15-Year Period (including the first 5 years)</b>

## TITLE 24

### BUILDING REGULATIONS

Single Story Building	\$60 per square foot	\$120 per square foot
Buildings Two Stories or Greater	\$45 per square foot	\$90 per square foot
Special building hazard: buildings in a relative hazard category 5 or with vertical or plan irregularities	\$45 per square foot	\$90 per square foot

2. Special building hazards. Where an Unreinforced Masonry Building of any size contains any of the following hazards, the building shall be seismically improved if the cost of alteration or repair exceeds \$45 per square foot:
  - a. The Building possesses an Occupancy Classification listed within the Relative Hazard Category 5 as determined in Section 24.85.040 of this Chapter; or
  - b. The building is classified as possessing either vertical or plan irregularities as defined in the OSSC.
3. Exclusions from cost calculations. Costs for site improvements, eco-roofs, mandated FM41 agreements, mandated ADA improvements, mandated non-conforming upgrades under Title 33, mandated elevator improvements and mandated or voluntary seismic improvements or work exempted from permit as described in Chapter 1 of the OSSC will not be included in the dollar amounts listed in Subsections 24.85.065 B.1. and 2.
4. Live/Work spaces in Unreinforced Masonry buildings. See Section 24.85.040 B for requirements when a Unreinforced Masonry building is converted to contain live/work spaces.
5. Automatic cost increase. The dollar amounts listed in Subsections 24.85.065 B.1. and 2. shall be modified each year after 2018 by the percent change in the R.S. Means of Construction Cost Index for Portland, Oregon. The revised dollar amounts will be made available at the Development Services Center.

#### C. Placard requirement for unreinforced masonry buildings.

On or before the dates set forth in the timetable below, all unreinforced masonry buildings that have not been retrofitted to the standard specified in Subsection 24.85.065 F. below must be posted with a placard in a conspicuous place on the exterior at the main entrance of the building. The criteria for the placard are as follows:

**TITLE 24**  
**BUILDING REGULATIONS**

1. Font. The font must be at least 50-point bold type, legible sans serif.
2. Size. The placard must be at least 8 inches by 10 inches.
3. Material. The placard must be constructed of a durable material that can withstand the elements and must be maintained to ensure that it is not defaced, removed, damaged, or degraded to the point where the placard is no longer legible.
4. Content. The placard must contain the following language: “THIS IS AN UNREINFORCED MASONRY BUILDING. UNREINFORCED MASONRY BUILDINGS MAY BE UNSAFE IN THE EVENT OF A MAJOR EARTHQUAKE.”
5. Duration. The placard must remain in place until the building is either: retrofitted and the Bureau of Development Services confirms that the retrofit specified in Subsection 24.85.065 F. has been completed and approved by BDS; or the building is demolished.
6. Timeline. Placards must be posted according to the following timeline:
  - a. Publicly-owned buildings. Publicly-owned URM buildings must post the required placard on or before January 1, 2019.
  - b. Non-profit buildings. Non-profit URM buildings must post the required placard on or before November 1, 2020.
  - c. All other buildings. All other URM buildings that do not fall into a. or b. above must post the required placard on or before March 1, 2019.

**D. Tenant notification for unreinforced masonry buildings.**

1. Existing leases and rental agreements. The owner of a building subject to Subsection 24.85.065 C. must notify existing tenants that the building is an unreinforced masonry building, and unreinforced masonry buildings may be unsafe in the event of a major earthquake.
2. Leases and rental agreements entered into or renewed after the timeline for placarding. Every lease or rental agreement entered into or renewed on or after the relevant timeline for posting the required placards as outlined in Subsection 24.85.065 C.6., involving a building subject to the requirements of Subsection 24.85.065 C., must contain a statement that: the building is an unreinforced masonry building, and unreinforced masonry buildings may be unsafe in the event of a major earthquake.

## **TITLE 24**

### **BUILDING REGULATIONS**

**E.** Documentation of compliance to be recorded.

The owner of a building subject to Subsections 24.85.065 C. and D. must execute and record an agreement not to remove the placard required in Subsection 24.85.065 C. and an acknowledgement of compliance with the tenant notification requirements outlined in Subsection 24.85.065 D. on a form provided by the Bureau of Development Services. The building owner must provide a copy of the recorded document to the Bureau.

**F.** Evidence that a building is exempt from placard requirements.

The following are evidence that an unreinforced masonry building meets the required retrofit standards and will exempt the building owner from complying with Subsections 24.85.065 C., D., and E.

**1.** Buildings that have been fully retrofitted to or shown to meet or exceed the following standards:

The Basic Performance Objective for Existing Buildings (BPOE) or better as defined in ASCE 41-17 or ASCE 41-13 for collapse prevention structural performance level under BSE-2E seismic hazard or life safety structural performance level under BSE-1E seismic hazard; and URM parapets, cornices and chimneys for life safety non-structural performance level under BSE-1E seismic hazard. The seismic hazards BSE-1 and BSE-2 are as previously defined in Section 24.85.020; or

**2.** Buildings that have previously been fully retrofitted prior to January 1, 2018 to one of the following standards:

**a.** Life Safety performance level or better using FEMA-178, FEMA 310, or ASCE 31, including bracing of parapets, cornices and chimneys; or

**b.** Oregon Structural Specialty Code, 1993 edition or later.

**G.** Enforcement.

**1.** Fire Marshal Inspections. As part of Portland Fire & Rescue's periodic inspections program outlined in Chapter 31.50, the Portland Fire Marshal is granted authority to inspect unreinforced masonry buildings for compliance with the provisions of Subsection 24.85.065 C. If the Fire Marshal determines there is a violation of Subsection 24.85.065 C., the Fire Marshal will issue a notice of violation to the owner of the building. The building owner will have 40 calendar days from the date of the notice of violation to comply with the requirements of Subsection 24.85.065 C., and the Fire

**TITLE 24**  
**BUILDING REGULATIONS**

Marshal will re-inspect the building for compliance. If the violation still exists at the time of the re-inspection, the Fire Marshal will charge a re-inspection fee and turn the case over to the Bureau of Development Services for further enforcement.

2. Bureau of Development Services' enforcement. BDS will use its existing enforcement authority as outlined in Section 3.30.040 to enforce the provisions of Subsections 24.85.065 C., D., and E.

**H.** Appeals.

1. Appeals of determination that building is unreinforced masonry or whether the building has been retrofitted: if the building owner disagrees with the determination that the building is an unreinforced masonry building or that the building was retrofitted to the standards outlined in Subsection 24.85.065 F., the building owner may appeal that determination as provided in Section 24.85.095.
2. If a building owner appeals the determination that the building is an unreinforced masonry building or that it has been retrofitted to the standards outlined in Subsection 24.85.065 F., and the Director upholds the URM determination, then the building owner has until the relevant date set forth in the timetable in Subsection 24.85.065 C.6., or two months from the written determination, whichever is later, to install the placard in accordance with Subsection 24.85.065 C. and complete the tenant notification outlined in Subsection 24.85.065 D.
3. Appeals related to BDS enforcement actions under Section 3.30.040 that do not fall under Subsection 24.85.065 H.1.-2. will follow the procedures laid out in that Chapter.

**I.** Future-discovered unreinforced masonry buildings.

If the Bureau of Development Services discovers that a building is an unreinforced masonry building that has not been retrofitted to the standards outlined in Subsection 24.85.065 F. after the relevant date set forth in the timetable in Subsection 24.85.065 C.6., the Bureau will provide written notice to the building owner that the building must comply with the provisions of Subsections 24.85.065 C., D., E, and F. The building owner will have three months from the Bureau's written determination and notice to property owner to either comply or file an appeal as described in Subsection 24.85.065 H.

## **TITLE 24**

### **BUILDING REGULATIONS**

#### **24.85.067 Voluntary Seismic Strengthening.**

(Added by Ordinance No. 178831, effective November 20, 2004.) Subject to permit approval, a building may be strengthened to resist seismic forces on a voluntary basis provided all of the following conditions are met:

- A.** Mandatory seismic strengthening is not required by other provisions of this Title;
- B.** The overall seismic resistance of the building or elements shall not be decreased such that the building is more hazardous;
- C.** Testing and special inspection are in accordance with the OSSC and the City of Portland Administrative Rules;
- D.** The standard used for the seismic strengthening is clearly noted on the drawings along with the pertinent design parameters; and
- E.** A written narrative shall be clearly noted on the drawings summarizing the building lateral system, seismic strengthening and known remaining deficiencies. The summary information shall reflect the level of analysis that was performed on the building.

#### **24.85.070 Phasing of Improvements.**

(Amended by Ordinance No. 178831, effective November 20, 2004.)

- A.** The Director may approve a multi-year phased program of seismic improvements when the improvements are pre-designed and an improvement/implementation plan is approved by the Director. The maximum total time allowed for completion of phased improvements shall be ten years. A legal agreement between the building owner and the City of Portland shall be formulated outlining the phased seismic improvements and shall be recorded with the property deed at the County.
- B.** Upon review, the Director may extend the maximum time for the phased improvements. The Director shall adopt rules under Section 3.30.035 describing the process for granting an extension.

#### **24.85.075 Egress Through Existing Buildings.**

(Added by Ordinance No. 178831, effective November 20, 2004.) The building structure and seismic resistance of an egress path through, under or over an existing building must meet the required seismic improvement standard specified in Section 24.85.040, Table 24.85-A, under any of the following conditions:

- A.** The egress path is from an adjacent new building or addition and the new building or addition area equals 1/3 or more of the existing building area; or,

**TITLE 24**  
**BUILDING REGULATIONS**

- B.** The egress path is from an adjacent existing building that undergoes alterations or a change of occupancy requiring its egress path(s) meet the seismic improvement standards as required by this Chapter; or
- C.** The additional occupant load, as determined by the OSSC, using the egress path through the existing building is 150 people or more.

**24.85.080 Application of Other Requirements.**

(Amended by Ordinance No. 178831, effective November 20, 2004.) Building permit applications to improve the seismic capability of a building shall not trigger: accessibility improvements so long as the seismic improvement does not lessen accessibility; fire life safety improvements so long as the seismic improvement does not lessen the buildings fire resistance or exiting capability; landscape improvements required by Chapter 33; street tree improvements required by Section 20.40.070.

Conformance with these regulations may not exempt buildings from future seismic regulations.

**24.85.090 Fee Reductions.**

(Amended by Ordinance No. 178831, effective November 20, 2004.) Building permit, plan review and fire life safety review fees for structural work related to seismic strengthening covered by this Chapter will be waived when such fees total less than \$2,500, and will be and reduced by 50 percent when such fees would total \$2,500 or more.

**24.85.095 Appeals.**

(Amended by Ordinance Nos. 178831 and 189201, effective November 9, 2018.) Except as otherwise provided in this Chapter 24.85, a property owner or the property owner's agent may appeal application of this Chapter 24.85 as outlined in Section 24.10.075.

**TITLE 24**  
**BUILDING REGULATIONS**

**CHAPTER 24.90 - MANUFACTURED  
DWELLING INSTALLATION AND  
ACCESSORY STRUCTURES,  
MANUFACTURED DWELLING PARKS,  
RECREATION PARKS, RECREATIONAL  
PARK TRAILER INSTALLATION AND  
ACCESSORY STRUCTURES**

(Chapter added by Ordinance No. 169312;  
Amended by Ordinance No. 185798 effective  
December 12, 2012).

**Sections:**

- 24.90.010 Purpose.
- 24.90.020 Scope.
- 24.90.030 Adoption of Codes and Regulatory Authority.
- 24.90.040 Definitions.
- 24.90.050 Administration and Enforcement.
- 24.90.060 Special Regulation.
- 24.90.070 Permit Application.
- 24.90.080 Violations.
- 24.90.090 Appeals.

**24.90.010 Purpose.**

The purpose of this Chapter is to provide minimum standards for the following:

- A.** Installation and maintenance of manufactured dwellings and accessory structures.
- B.** Development and maintenance of manufactured dwelling parks.
- C.** Installation and maintenance of park trailers and recreational vehicle accessory structures.
- D.** Development and maintenance of recreational vehicle parks.

**24.90.020 Scope.**

(Amended by Ordinance No. 185798, effective December 12, 2012.) Regulation under this Chapter covers all installations or alteration of manufactured dwellings, recreational park trailers and other recreational vehicles, and accessory structures. Regulation under this Chapter covers the development and maintenance of manufactured dwelling parks, recreational vehicle parks, recreation parks, picnic parks, and organizational camps.

**24.90.030 Adoption of Codes and Regulatory Authority.**

(Amended by Ordinance Nos. 176955 and 185798, effective December 12, 2012.)

**TITLE 24**  
**BUILDING REGULATIONS**

- A.**     Manufactured Dwelling Installation Specialty Code. The provisions of the State of Oregon, Manufactured Dwelling Installation Specialty Code, 2010 Edition, as developed at the direction of the Building Codes Division of the Oregon Department of Consumer and Business Services through the Residential and Manufactured Structures Board, is hereby adopted by reference. The Manufactured Dwelling Installation Specialty Code is on file in the Development Services Center of the City of Portland.
- B.**     Manufactured Dwelling and Park Specialty Code. The following provisions of the State of Oregon, Manufactured Dwelling and Park Specialty Code, 2002 Edition, as developed at the direction of the Oregon Building Codes Division Administrator through the Oregon Manufactured Structures and Parks Advisory Board, a copy of which is on file in the Development Services Center of the City of Portland, are hereby adopted by reference:

  - 1.**     All of Chapter One (Administration), except the following:

    - a.**     1-1.4 (Design Loads)
    - b.**     1-2.4 (Energy Conservation Equivalents)
    - c.**     1-3 (Manufactured Dwellings Sold “As Is”)
    - d.**     1-6.7 (Plot Plans Required)
    - e.**     1-6.8 (Plot Plans Not Required)
    - f.**     1-6.11 (Multiple-family Housing Plans)
    - g.**     1-7.12 (Manufactured Dwelling Installation Permits)
    - h.**     1-8.6 (Visual Inspections)
    - i.**     1-8.7 (Appliance Inspections)
    - j.**     1-8.9 (Alteration Inspections)
    - k.**     1-8.11 (Quality Assurance Inspections)
    - l.**     1-8.13 (Installation Inspections)
    - m.**     1-9 (Insignias and Labels)
    - n.**     1-10 (Certifications), except section 1-10.2.1 (Certificates of Occupancy Required) is adopted

# **TITLE 24**

## **BUILDING REGULATIONS**

- o. 1-11 (License Required) –all, except for introductory language and paragraph (h) in 1-11.3 (Electrical) and introductory language and paragraph (i) in 1-11.4 (Plumbing) are adopted
  2. All of Chapter Ten (Manufactured Dwelling Park Construction) and the corresponding tables and figures
  3. Appendix A (Definitions)
  4. Appendix B (Acronyms)
  5. Appendix C (Symbols)

C. The City of Portland through the Bureau of Development Services (“Bureau”) adopts regulatory authority for the installation maintenance and alteration of manufactured dwellings and accessory structures as authorized in ORS 446.250 and 446.253, and OAR 918-500-0055; for the development and maintenance of manufactured dwelling parks as authorized in ORS 446.062 and 446.430 and OAR 918-600-0010; for the development and maintenance of recreation parks, picnic parks and organizational camps as authorized in ORS 455.170; and for the installation, maintenance and alteration of residential park trailers, other recreational vehicles and accessory structures as authorized in ORS 455.170 and OAR 918-525-0370. Nothing contained herein provides regulatory authority when delegation of authority is expressly withheld by the State.

**24.90.040 Definitions.**

(Amended by Ordinance No. 185798, effective December 12, 2012.) For the purposes of this Chapter definitions contained in Chapter 24.15 shall apply in conjunction with definitions found in ORS 446.003, ORS 455.010, OAR 918-500-0005, OAR 918-525-0005, OAR 918-600-0005 and OAR 918-650-0005. Definitions in ORS or OAR shall take precedence over other conflicting definitions.

**24.90.050 Administration and Enforcement.**

(Amended by Ordinance Nos. 176955 and 185798, effective December 12 , 2012.) This Chapter shall be administered and enforced in conformance with applicable provisions of the 2010 Edition of the Oregon Manufactured Dwelling Installation Specialty Code, the provisions of the 2002 Edition of the Oregon Manufactured Dwelling and Park Specialty Code adopted by reference in Subsection 24.90.030 B. of this Chapter, and the Oregon Administrative Rules contained in Chapter 918 Division 500, 515, 525, 530, 600 and 650.

**24.90.060 Special Regulation.**

Manufactured Dwellings and Cabanas installed on a residential lot shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards which reduce levels equivalent to the performance standards required of single family dwellings

constructed under the state building code. Skirting and permanent enclosures shall be required for all park trailer and cabana installations.

**24.90.070 Permit Application.**

(Amended by Ordinance No. 185798, effective December 12, 2012.) Permits are required for the establishment, construction, enlargement, alteration or removal of manufactured dwelling parks, recreation parks, and organizational camps. Permit applications, plans and specifications and permit issuance shall conform to Section 24.10.070, and applicable Oregon Administrative Rules. Permits are required for the installation or alteration of manufactured dwellings, recreational park trailers, recreational vehicles as defined in OAR 918-525-0005, and accessory structures. Plans and specifications are required in conformance with Section 24.10.070 and applicable Oregon Administrative Rules except when:

- A. All installation is within an existing manufactured dwelling park and all the installation is performed in accordance with the manufacturer's approved installation instructions.
- B. All installation is within an existing recreational vehicle or combination park, and all installation is performed under OAR 918-530-0005 through 918-530-0120.

When the Director determines special installation or construction requires design by a registered engineer or architect, such design shall be submitted in triplicate and approved by the Bureau prior to commencement or continuance of installation or construction.

**24.90.080 Violations.**

(Amended by Ordinance No. 185798, effective December 12, 2012.) Any person who violates any provision of this Chapter and/or any codes adopted herein shall be subject to the penalties as prescribed by law.

**24.90.090 Appeals.**

(Amended by Ordinance Nos. 185798 and 187432, effective December 4, 2015.) Any person aggrieved by a decision of the Bureau related to the application and interpretation of the Codes listed in Section 24.90.030 of this Chapter may request an administrative appeal with the Administrative Appeal Board in accordance with Section 24.10.075. Any person aggrieved by a final decision of the Building Official made under Section 24.10.075 may appeal the decision to the appropriate Board of Appeal described in Sections 24.10.080, 25.07, 26.03.070 and 27.02.031. Within 30 days of the final appeal finding by the Board of Appeal, an appellant who continues to be aggrieved may appeal to the appropriate State Specialty Advisory Board pursuant to ORS 455.690.

**TITLE 24**  
**BUILDING REGULATIONS**

**CHAPTER 24.95 - SPECIAL DESIGN  
STANDARDS FOR FIVE STORY  
APARTMENT BUILDINGS**

(Chapter repealed by Ordinance No. 185798,  
effective December 12, 2012.)

FIGURES & TABLES

BASIC FLOODPLAIN RELATIONSHIPS

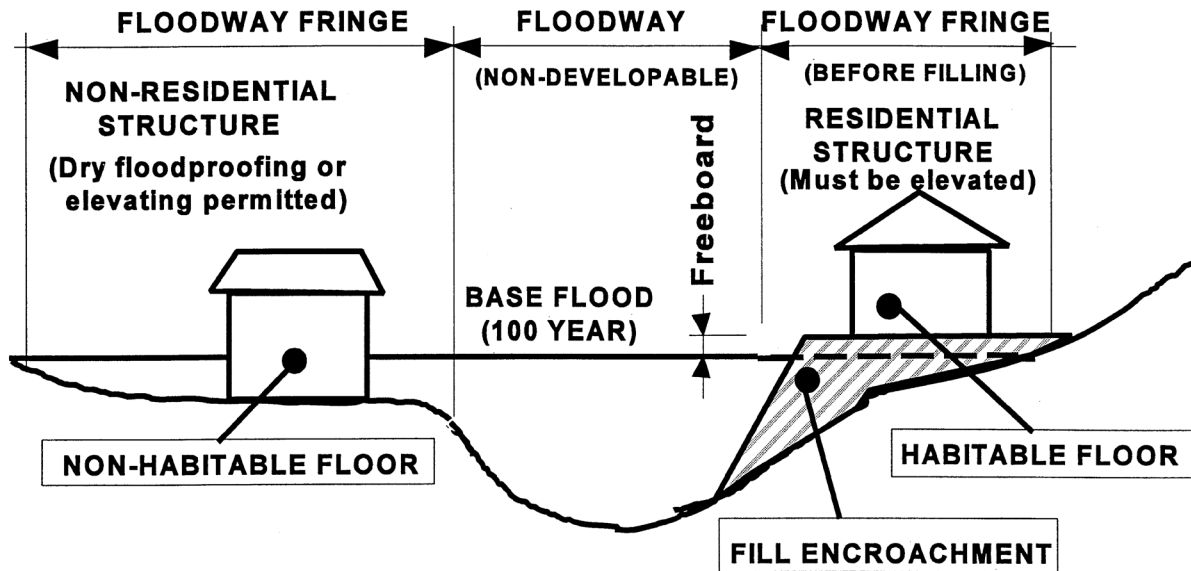


FIGURE 1 (Section 24.50.070)

**TITLE 24  
BUILDING REGULATIONS**

**FIGURE 2 (24.70)**

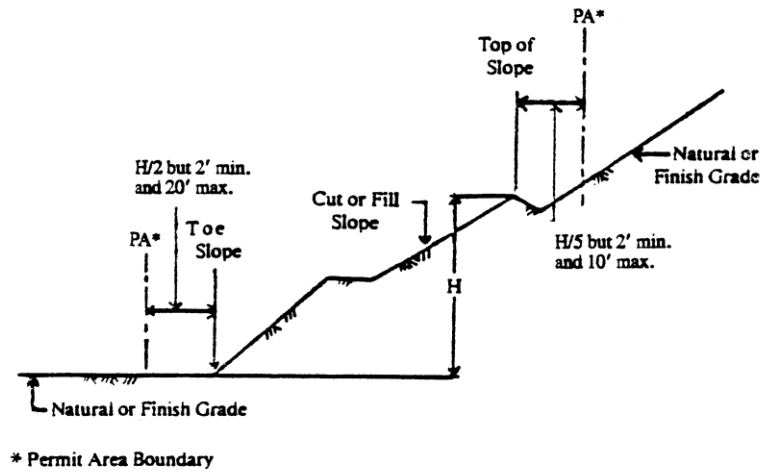


Table No. 24.70-C  
Required Setbacks from permit area boundary (in feet)

**TABLE 24-70C**

H	SETBACKS	
	a	b'
Under 5	0	1
5 - 30	H/2	H/5
Over 30	15	6

Additional width may be required for interceptor drain.

**FIGURE 3 (24.70)**

