

## CITY OF SEATAC PLANNING COMMISSION MEETING

Riverton Room, SeaTac City Hall, 4800 S. 188<sup>th</sup> Street April 19, 2016, 5:30 p.m.

#### **MEETING AGENDA**

- 1) Call to Order/Roll Call 5:30 p.m.
- 2) Approval of Minutes of April 5, 2016 Planning Commission meeting (Exhibit A)
- 3) Public Comment: Public comment will be accepted on items not scheduled for a public hearing
- 4) Briefing on Implementing Regulations for the Angle Lake Station Area Plan (Exhibit B)
- 5) Briefing on Adoption of 2015 International Codes (Building, Fire, Property Maintenance) (Exhibit C)
- 6) CED Director's Report
- 7) Planning Commission Comments (including suggestions for next meeting agenda)
- 8) Adjournment

The Planning Commission consists of five members appointed by the Mayor and confirmed by the City Council. The Commission primarily considers plans and regulations relating to the physical development of the city, plus other matters as assigned. The Commission is an advisory body to the City Council.

All Commission meetings are open to the public and comments are welcome. Please be sure to be recognized by the Chair prior to speaking.

# CITY OF SEATAC PLANNING COMMISSION Minutes of April 5, 2016 Regular Meeting

Members present: Joe Adamack, Roxie Chapin, Tom Dantzler, Robert Scully, Jim Todd

Members absent: None

**Staff present:** Steve Pilcher, Planning Manager; Mike Scarey, Senior Planner; Anita

Woodmass, Senior Planner

#### 1. Call to Order

Chair Adamack called the meeting to order at 5:30 p.m.

#### 2. Approval of minutes

Moved and seconded to approve the minutes of the March 15, 2016 meeting as presented. **Passed 5-0.** 

#### 3. Public Comment

None.

#### 4. GMA Consistency Amendments

Senior Planner Mike Scarey noted the purpose of the evening's briefing was to review the last group of proposed amendments to the City's Sensitive Areas regulations. The Commission will be scheduled to conduct a public hearing on all of the proposed amendments at its May 3<sup>rd</sup> regular meeting, after SEPA has been issued. Staff will also be at next Tuesday's City Council meeting (April 12<sup>th</sup>) to brief the Council on the proposed changes.

Mr. Scarey explained that further research indicates there are two main aquifers underlying the city; both the Highline Water District and Seattle Public Utilities have wells that tap into these aquifers. In general, these aquifers lie approx. 200 feet below the surface. There are existing wellhead protection zones established around the two utilities wells. These zones are designated to provide protection to the water source and will be grouped as Critical Aquifer Recharge Areas, Category 1.

It was noted that both proposed SR-509 and portions of the airport's SASA overlap with some of these wellhead protection areas. It was suggested that the draft regulations address airport operations and also potential impacts from highway construction.

Mr. Scarey reviewed the list of uses proposed to be prohibited within the identified CARAs. He noted there is additional research to be done, which may allow for reduction of a table included

in the draft regulations. He also reviewed the schedule for moving forward and noted an effort will be made to reach out the business community.

#### 5. Implementing Regulations for the Angle Lake Station Area

Senior Planner Anita Woodmass noted that the primary focus of the evening's briefing will be to review the land use charts proposed for the district. Planning Division staff has spent a considerable amount of time reviewing and discussing these charts. She noted that some new definitions are being created (e.g., micro-brewery, - winery; medium manufacturing). Ms. Woodmass also mentioned that approx. 30 uses have either been eliminated or "collapsed" in more general use categories. The latter will provide staff with greater flexibility in dealing with proposed uses in the District.

She noted that uses within the District Center will differ than what may be allowed elsewhere within the District, as the Center is intended to focus more on uses that generate day/evening activities and that reduce potential vehicular and pedestrian conflicts.

Ms. Woodmass mentioned that staff is proposing approx. 38 definitions for terms that currently are not defined in the code.

Various policy directions from the Angle Lake Plan were reviewed in the context of proposed implementing code. The Commission discussed the issue of mobile food vending and how/where to allow this use. It also discussed how restrictive to be concerning drive-throughs; consensus was to not allow in the District Center, noting that the issue could be revisited in the future.

Ms. Woodmass stated that staff is recommending eliminating the requirement for ground floor commercial as part of mixed-use buildings and that the proposal will allow multifamily in all zone districts in the center. She then discussed options for the Kenworth site (currently zoned Industrial).

Commissioners discussed the "Flight Car" business and how it would fit under the proposed regulations; asked staff to investigate whether dog daycares could be allowed; and recommended some miscellaneous amendments.

#### 5. CED Director's Report

Mr. Pilcher mentioned that CED Director Scorcio was attending the National Planning Conference in Phoenix and would return next week. Mr. Scorcio is also currently serving as the Acting City Manager.

Mr. Pilcher stated that at the next meeting, staff will bring forward proposed code changes to adopt the 2015 version of the I-Codes. He also announced several personnel decisions, including the hiring of Mary Kate McGee as Building Services Supervisor and Eric Proctor as Public Works Inspector Supervisor.

#### **6. Planning Commissioner Comments**

Commissioner Todd reported on a meeting held the previous week to discuss potential re-use of the fire station on South 200<sup>th</sup>, once the new station is occupied. He stated that appears there are enough structural building issues that it makes more sense for the fire station to be torn down.

#### 7. Adjournment

Moved and seconded to adjourn. Motion passed 5-0. The meeting adjourned at 6:56 p.m.



To: Planning Commission

From: Anita Woodmass, Senior Planner

Date: April 19, 2016

Re: Briefing on the Angle Lake Station Area Zoning Implementing Regulations

Staff continues with the drafting of standards for implementing the Angle Lake Station Area Plan. Currently interim standards exist for this district with the goal of finalizing it on June 30, 2016.

The following topics will be reviewed and discussed at this meeting to further the finalization of the standards. Following this discussion, a review of all the key pieces of code will be complete:

- Review and discuss Building Design including weather protection, ground floor transparency, building façade treatments and roof lines.
- The presentation will include an overview of the plan's vision and intent, and analysis of some of the key issues.
- Overview of the project schedule, Department of Commerce Review and Planning Commission public hearing.
- Planning Commission input will be sought with regard to the proposed options and general direction regarding building design.
- A public hearing will be held on May 17, 2016.
- Staff will provide a draft version of the code language for Planning Commission review at the May 3, 2016 meeting.



### **MEMORANDUM**

#### COMMUNITY & ECONOMIC DEVELOPMENT

Date: December 31, 2015
To: Planning Commission

From: Steve Pilcher, Planning Manager

Subject: Wireless Communication Facilities regulations

Over the past few meetings, we've discussed the changes in Federal law regarding local governments' ability to regulate wireless communication facilities (primarily cell phone technology). The changes were embedded in Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. 1455, the "Spectrum Act." It is evident from reading the Act and the subsequent interpretation promulgated by the Federal Communications Commission's (FCC) "Broadband Deployment Report and Order," that amendments to SeaTac's regulations are in order.

There are several major issues raised in the FCC rule that impact the City's current regulations. First, the rules provide a fairly broad exemption for modifications/upgrades to existing facilities. Local governments must approve (and may not deny) an Eligible Facilities Request that "does not result in a substantial change to the physical dimensions" of a tower or "base station." Eligible Facilities Requests include 1) collocation of new transmission equipment; 2) removal of transmission equipment; or 3) replacement of transmission equipment. A "substantial change" is one that: 1) increases the height of a tower by more than 10%, not to exceed 20 ft; 2) involves adding an appurtenance that protrudes more than 20 ft. from the edge of a tower or more than 6 ft. from other support structures (e.g., a water tower); and 3) other factors.

Staff is recommending following the approach of the City of Olympia, where they added a new chapter to their zoning code specifically to address "eligible wireless communication facilities modifications." This appears to be the quickest and simplest way to ensure SeaTac's regulations conform to the changes in federal law.

We noted earlier that while speaking with a representative from AT&T, he noted that various other portions of our code were perhaps outdated and do not reflect current technology needs of the industry. We are still waiting to hear what those areas might be.

In addition, we are aware of a concern of the Port of Seattle regarding adding an exemption for "Bird Safety/Exclusionary" devices. I have reached out to the appropriate individual from the Port, but that individual has not provided details beyond the PowerPoint slides shared earlier with the Commission.

Attachment: Draft of new Chapter 15.485

## Chapter 13.100 GENERAL PROVISIONS

#### Sections:

13.100.010	Purpose and scope.
13.100.020	Definitions.
13.100.030	Modifications.
13.100.040	Alternate materials, design and methods of construction and equipment.
13.100.050	Duties and powers of Building Official, Fire Chief and Director of Community and Economic
	Development Public Works.
13.100.060	Permits.
13.100.070	Permit and plan review fees.
13.100.100	Appeals.
13.100.110	Stop work orders.
13.100.120	Violations not subject to the notice and order procedures.

#### 13.100.010 Purpose and scope.

- A. The purpose of this chapter is to provide additional administrative and enforcement provisions for the adopted technical codes within the City of SeaTac.
- B. The provisions of this chapter serve as a supplement to the administrative and enforcement procedures found in the other adopted technical codes. In case of a conflict between these provisions and those found in any of the other technical codes, these provisions shall apply.
- C. Pursuant to an interlocal agreement entered into by and between the City and the Port of Seattle, pursuant to Resolution No. 00-022 and Port Resolution No. 3445, respectively, effective January 1, 2000, and commencing through September 4, 2007, the City recognizes concurrent authority of the Port to administer, implement, and enforce the technical codes and standards adopted in this title and defers to the Port's exercise of such jurisdiction as to development projects on Port-owned property within the City which are for airport uses, as that term is defined in the September 4, 1997, interlocal agreement between the City and the Port. (Ord. 04-1008 § 3)

#### 13.100.020 Definitions.

For the purposes of this chapter, the following definitions shall apply unless the context thereof shall clearly indicate to the contrary:

A. "Building official" means the person charged with the administration and enforcement of the technical codes or a regularly authorized deputy. The authority of this position is held by the Building Services Manager.

B. "Building service equipment" means the plumbing, mechanical, electrical and elevator equipment, fire suppression systems, fuel tanks, including piping, wiring, fixtures and other accessories which provide sanitation, lighting, power, heating, ventilation, cooling, refrigeration, fire-fighting and transportation facilities essential to the occupancy of the building or structure for its designated use.

C. "Dwelling" means a building that contains one (1) or two (2) dwelling units used, intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes.

D. "Technical codes" means those codes adopted by this title containing the provisions for design, construction, alteration, moving, demolition, repair, removal, use, location, occupancy and maintenance of buildings, structures and building service equipment. Where no applicable standards or requirements are set forth in this title, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the City of SeaTac, technical codes may also include applicable standards of the National Fire Protection Association or other nationally recognized standards approved by the Building Official.

E. "Valuation" or "value" means, as applied to a building and its building service equipment, the estimated cost to replace the building and its building service equipment in kind, based on current replacement costs. (Ord. 04-1008 § 3)

#### 13.100.030 Modifications.

Wherever there are practical difficulties involved in carrying out the provisions of the technical codes, the Building Official shall have the authority to grant modifications for individual cases, upon a request by the owner or owner's representative, provided the Building Official shall first find that a special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of the technical codes and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of any action granting modifications shall be recorded and entered in the files of the building division. (Ord. 04-1008 § 3)

#### 13.100.040 Alternate materials, design and methods of construction and equipment.

A. The provisions of the technical codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the technical codes; provided, that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the Building Official finds that the proposed design is satisfactory, complies with the intent of the provisions of the technical codes, and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in the technical codes in quality, strength, effectiveness, fire resistance, durability and safety.

B. Research Reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in the technical codes, shall consist of valid research reports from approved sources.

C. Tests. Whenever there is insufficient evidence of compliance with the provisions of the technical codes, or evidence that a material or method does not conform to the requirements of technical codes, or in order to substantiate claims for alternative materials or methods, the Building Official shall have the authority to require tests as evidence of compliance to be made at no expense to the City of SeaTac. Test methods shall be as specified in the technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the Building Official for the period required for retention of public records. (Ord. 04-1008 § 3)

## 13.100.050 Duties and powers of Building Official, Fire Chief and Director of <u>Community</u> and Economic Development <u>Public Works</u>.

A. The Building Official is hereby authorized and directed to enforce the provisions of the technical codes, except for the Grading Code and Fire Code. The Building Official shall have the authority to render interpretations of the technical codes, except for the Grading Code and Fire Code and to adopt policies and procedures in order to clarify the application of their provisions. The Fire Chief, or designee, is responsible for the enforcement and interpretation of the Fire Code. The Director of Community and Economic Development Public Works or designee is responsible for the enforcement and interpretation of the Grading Code. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of the technical codes. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in the technical codes.

B. Inspections. The Building Official shall make all of the required inspections, or the Building Official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The Building Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise.

C. Identification. The Building Official shall carry proper identification when inspecting structures or premises in the performance of duties under the technical codes.

D. Right of Entry. Where it is necessary to make an inspection to enforce the provisions of the technical codes, or where the Building Official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of the technical codes which makes the structure or premises unsafe, dangerous or hazardous, the Building Official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by the technical codes; provided, that if such structure or premises be occupied, that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the Building Official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the Building Official shall have recourse to the remedies provided by law to secure entry.

E. Department Records. The Building Official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records by the City's retention schedule. (Ord. 04-1008 § 3)

#### 13.100.060 Permits.

A. Except for those items specifically exempt in each of the technical codes, no building, structure or building service equipment regulated by the technical codes shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate, appropriate permit for each building, structure or building service equipment has first been obtained from the Building Official. Exemptions from permit requirements of the technical codes shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of those codes or any other laws or ordinances of the City of SeaTac or the State of Washington.

B. Emergency Repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the Building Official.

- C. Repairs. Application or notice to the Building Official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement, or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, fire suppression, electric wiring, mechanical or other work affecting public health or general safety.
- D. Application for Permit. In order to obtain a permit for work regulated by this title, the applicant shall first file a completed application in writing on a form furnished by the City for that purpose. Along with the application, the applicant shall also submit related application and construction documents to include all other data, plans, specifications, calculations and information as required by the City or by the State of Washington. No action or review will be taken by the City if the application or application and construction documents are incomplete.
- E. Action on Application. The Building Official shall review or cause to be reviewed applications and any required construction documents for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the Building Official shall reject such application in writing, stating the reasons therefor. If the Building Official is satisfied that the proposed work conforms to the requirements of the technical codes and laws and ordinances applicable thereto, and all required fees associated with the permit have been paid to the City, the Building Official shall issue a permit as soon as practicable.

#### F. Time Limitation of Application.

- 1. Applications for which no permit is issued within eighteen (18) months following the date of application shall expire by limitation and plans and other data submitted for review may thereafter be returned to the applicant or destroyed in accordance with state law.
- 2. Applications may be canceled for inactivity if an applicant fails to respond to the department's written request for revisions, corrections, actions or additional information within ninety (90) days of the date of request. The Building Official may extend the response period beyond ninety (90) days if within the original ninety (90) day time period the applicant provides and subsequently adheres to an approved schedule with specific target dates for submitting the full revisions, corrections or other information needed by the department.

G. Validity of Permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of the technical codes or of any other ordinance of the City of SeaTac. Permits presuming to give authority to violate or cancel the provisions of the technical codes or other ordinances of the City of SeaTac shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the Building Official from requiring the correction of errors in the construction documents and other data. The Building Official is also authorized to prevent occupancy or use of a structure when in violation of this code or other ordinances of the City of SeaTac.

#### H. Expiration of Permits.

- 1. Every permit issued shall expire two (2) years from the date of issuance. The Building Official may approve a request for an extended expiration date where a construction schedule is provided by the applicant and approved prior to permit issuance.
- 2. Every permit that has been expired for one (1) year or less may be renewed for a period of one (1) year for an additional fee as long as no changes have been made to the originally approved plans. For permits that have been expired for longer than one (1) year, a new permit must be obtained and new fees paid. No permit shall be renewed more than once.
- 3. Electrical, mechanical and plumbing permits shall expire at the same time as the associated building permit except that if no associated building permit is issued, the electrical, mechanical and/or plumbing permit shall expire one hundred eighty (180) days from issuance.
- 4. The Building Official may grant a thirty (30) day extension to an expired permit for the purpose of performing a final inspection and closing out the permit as long as not more than one hundred eighty (180) days has passed since the permit expired. The thirty (30) day extension would commence on the date of written approval, provided no changes have been made or will be made in the plans or scope of work. If work required under a final inspection is not completed within the thirty (30) day extension period, the permit shall expire. However, the Building Official may authorize an additional thirty (30) day extension if conditions outside of the applicant's control exist and the applicant is making good effort to complete the permitted work.
- I. Suspension or Revocation. The Building Official is authorized to suspend or revoke a permit issued under the provisions of this title whenever the permit was issued in error or on the basis of incorrect, inaccurate, or

incomplete information, or in violation of any ordinance or regulation or any of the provisions of the technical codes.

J. Placement of Permit. The permit shall be kept on the site of the work until the completion of the project. (Ord. 10-1018 § 1: Ord. 04-1008 § 3)

#### 13.100.070 Permit and plan review fees.

A. A permit shall not be valid until all fees owed to the City of SeaTac have been paid nor shall an amendment to a permit be released until the additional fee, if any, has been paid. The permit and plan review fee schedules along with other fees, including, but not limited to, plan review, drainage plan review, and inspections, shall be as set forth in the City schedule of license fees, permit fees, and other fees and charges adopted by resolution.

B. Project Valuation. The applicant for a permit shall provide an estimated project value at time of application. Project valuations shall include total value of work, including materials and labor, for which the permit is being issued such as electrical, gas, mechanical, plumbing equipment and other permanent systems. The project valuation shall be set by the Building Official.

The valuation shall be based on the most recent Table 1 and Table 2 of the Building Valuation Data published by the International Code Council or the actual value of the work, whichever is higher. In addition to the regional modifier, the valuation may be reduced by the following multipliers:

Residential additions	.70
Residential remodels	.30
Residential decks	.20
Commercial remodels	.30

C. Work Commencing Before Permit Issuance. Any person who commences any work on a building, structure, electrical, gas, fuel tank, mechanical, plumbing or fire suppression system before obtaining the necessary permits shall be subject to an investigation fee as determined by the Building Official. The fee shall be an amount equal to the permit fee with a minimum fee of one hundred dollars (\$100.00). The investigation fee shall be in addition to the required permit fee.

D. Refunds. The Building Official may authorize refunding any fee paid hereunder which was erroneously paid or collected. The Building Official may authorize the refunding of not more than eighty percent (80%) of the permit fee paid when no work has been done under the permit. The Building Official may authorize the refunding of not more than eighty percent (80%) of the plan review fee paid when an application for a permit for which a plan review fee has been done is withdrawn or canceled before any plan reviewing has been done. (Ord. 04-1008 § 3)

#### 13.100.100 Appeals.

A. All references in the technical codes to the Board of Appeals shall be deemed to refer to the Hearing Examiner system of Chapter 1.20 SMC. The Hearing Examiner shall have no authority relative to interpretation of the administrative provisions of the technical codes nor shall the Hearing Examiner be empowered to waive requirements of the technical codes.

B. Appeals to a decision by the Fire Chief shall be made to the Hearing Examiner. All references in the fire code and adopted International Fire Code to the Fire Code Board of Appeals shall be deemed to refer to the Hearing Examiner system of Chapter 1.20 SMC. (Ord. 10-1018 § 2: Ord. 04-1008 § 3)

#### 13.100.110 Stop work orders.

A. Whenever the Building Official finds any work regulated by this title being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the Building Official is authorized to issue a stop work order.

B. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume. (Ord. 04-1016 § 2)

#### 13.100.120 Violations not subject to the notice and order procedures.

Violation of the provisions of Section 108.4.1 and 108.5 of the International Property Maintenance Code, as adopted by reference in Chapter 13.210 SMC, as now or may be subsequently amended, shall be a misdemeanor, punishable by a fine of up to one thousand dollars (\$1,000) or a jail sentence of up to ninety (90) days, or both, and the violation shall be a strict liability offense. (Ord. 04-1016 § 3)

#### Chapter 13.110 BUILDING CODE

#### Sections:

13.110.010	Building Code.
13.110.020	International Building Code.
13.110.030	International Residential Code.
13.110.040	International Performance Code. Repealed
13.110.050	International Existing Building Code.
13.110.060	Copies on file.

#### 13.110.010 Building Code.

The International Building Code, International Residential Code, International Performance Code and the International Existing Building Code, as adopted and amended by this chapter, shall collectively be referred to as the Building Code. (Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1008 § 3)

#### 13.110.020 International Building Code.

The 20122015 Edition of the International Building Code, as published by the International Code Council, as amended by the Washington State Building Code Council and published in Chapter 51-50 WAC, as now or hereafter amended, is hereby adopted by reference with the following additions and exceptions:

- A. Appendixes E and H are hereby adopted.
- B. The following is added to Section 504, Height Modifications:
  - 504.2.1 Five story type VA buildings allowed.

Type VA buildings with B, M, R-1 and R-2 occupancies may be increased to five stories in height in accordance with all of the following:

- 1. The building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1; and
- 2. The building is equipped with a complete, approved fire alarm and detection system; and
- 3. The fire sprinkler alarm system is provided with annunciation for each floor; and

- 4. The building does not exceed 7060 feet in height; and
- 5. The vertical exit enclosures shall be smoke proof enclosures in accordance with Section 909-20; and
- 6. Special inspection is provided for the lateral support portion of the structural system; and
- 7. The building must comply with all other applicable provisions of Title 13 of the SeaTac Municipal Code.

(Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1029 § 1: Ord. 04-1008 § 3)

#### 13.110.030 International Residential Code.

The 20122015 Edition of the International Residential Code, as published by the International Code Council, as amended by the Washington State Building Code Council and published in Chapter 51-51 WAC, as now or hereafter amended, is hereby adopted by reference with the following additions and exceptions:

- A. Appendix G and R isare adopted.
- B. Table R301.2, Climate and Geographic Design Criteria, is hereby amended to read as follows:

Ground/Roof Snow Load:	<u>15</u> psf
Wind Speed:	85 mph
Topographic Effects:	No
Seismic Design Category:	D2
Subject to Damage From:	
Weathering:	Moderate
Frost Line Depth:	18 inches
Termite:	Slight to Moderate
Decay:	Slight to Moderate

Outside Design Temperatures: 24F Heat; 83F Cool.

Ice Shield Underlayment No

Required:

Flood Hazards: FEMA # 530320

Air Freezing Index: 50

Mean Annual Temperature: 51.4

C. Sections R105.2(1) and (7) are is hereby amended to read as follows:

1. One-story detached accessory structures constructed under the provisions of the IRC used as tool and storage sheds, tree supported play structures, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58 m²).

- 7. Prefabricated swimming pools provided they meet one of the following conditions:
- a. The pool is less than 24 inches deep.
- b. The pool walls are entirely above ground and the capacity does not exceed 5,000 gallons.
- D. The following is added to R405.1.1 to read as follows:

Drainage. Provisions shall be made for the control and drainage of water around and under buildings.

Adequate provisions shall be made to insure that under floor spaces remain free of running or standing water by the installation of drains. Additional drains are required in foundations to relieve water from under floor spaces where it is determined by the Building Official that such drainage is required. Drain pipes shall be of sufficient size to adequately convey water to an approved location, but shall be a minimum size of 4 inches. Provisions shall be made to prevent the drainage system from becoming blocked.

(Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1008 § 3)

#### 13.110.040 International Performance Code. Repealed

The 2012 Edition of the International Performance Code, published by the International Code Council, as now or hereafter amended, is hereby adopted. (Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1008 § 3)

#### 13.110.050 International Existing Building Code.

The 2015 Edition of the International Existing Building Code, published by the International Code Council, as now or hereafter amended, is hereby adopted. (Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1008 § 3)

#### 13.110.060 Copies on file.

At least one (1) copy of the adopted editions of the International Building Code, International Residential Code, International Performance Code and the International Existing Building Code shall be on file in the office of the Building Official on behalf of the City Clerk. (Ord. 13-1009 § 1 (part): Ord. 10-1018 § 3 (part): Ord. 07-1012 § 1: Ord. 04-1008 § 3)

## Chapter 13.150 FIRE CODE

Sections:	
13.20.010	Adoption
13.20.020	Amendments to the International Fire Code – Chapter 1, Scope and Administration.
13.20.030	Amendments to the International Fire Code – Chapter 2, Definitions.
13.20.040	Amendments to the International Fire Code – Chapter 3, General Requirements
13.20.050	Reserved.
13.20.060	Amendments to the International Fire Code – Chapter 5, Fire Service Features.
13.20.070	Amendments to the International Fire Code – Chapter 6, Building Services and Systems.
13.20.080	Amendments to the International Fire Code – Chapter 7, Fire-Resistance-Rated Construction Fire and Smoke Prevention Features.
13.20.090	Amendments to the International Fire Code – Chapter 9, Fire Protection Systems.
13.20.100	Amendments to the International Fire Code – Chapter 11, Construction Requirements for Existing Buildings.

- 13.20.110 Amendments to the International Fire Code Chapter 80, Reference Standards.
- 13.20.120 Amendments to the International Fire Code Appendix B, Fire-Flow Requirements for Buildings.
- 13.150.010 Adoption.

The International Fire Code with Appendix B, 2012 Edition, as published by the International Code Council, as amended in Chapters 51-54A WAC, together with amendments, additions, and deletions adopted by reference, and together with SeaTac modifications, is adopted as the City of SeaTac Fire Code, and referred to as "this Code" in this chapter. At least one (1) copy of the adopted edition of the International Fire Code as published by the International Code Council shall be on file in the office of the Building Official on behalf of the City Clerk.

**13.20.020.** Amendments to the International Fire Code – Chapter 1, Scope and Administration. The following local amendments to Chapter 1 of the International Fire Code, entitled "Scope and Administration," are hereby adopted and incorporated into the International Fire Code:

- A. A new subsection 104.1.1 is added to read as follows:
  - **104.1.1. Retained authority Additional conditions.** The fire code official retains the authority to impose additional conditions where the official determines it necessary to mitigate identified fire protection impacts and problematic fire protection systems. These conditions may include, by way of example and without limitation, increased setbacks, use of fire retardant materials, installation and/or modification of standpipes, fire sprinkler and fire alarm systems.
- B. A new subsection 105.1.4 is added to read as follows:
  - **105.1.4. Term.** Operational permits issued in accordance with this code shall be valid for a 12 month period and are renewable at the end of that 12 month term.
- C. A new subsection 105.6.47–50 is added to read as follows:
  - **105.6.47**<u>50</u>. **Commercial Kitchen.** An operational permit is required for all commercial kitchens with type I hood systems.
- D. A new subsection 105.6.48-51 is added to read as follows:
  - **105.6.48**<u>51</u>. Emergency and standby power systems. An operational permit is required for code required emergency or standby power systems identified in NFPA 110.
- E. A new subsection 105.7.47–21 is added to read as follows:
  - **105.7.4721. Emergency and standby power systems.** A construction permit is required for the installation of a code required emergency or standby power systems identified in NFPA 110.
- F. Section 108 of the International Fire Code is amended to read as follows:

**108 Appeals.** The Hearing Examiner shall constitute the board of appeals for all matters concerning the application of the technical codes. Appeals to the hearing examiner shall be made pursuant to Chapter 13.100.100 SMC.

G. Subsection 109.4 of the International Fire Code is amended to read as follows.

**109.4 Violation Penalties**. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than one thousand (1,000) dollars or by imprisonment of not more than 90 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

H. Subsection 111.4 of the International Fire Code is amended to read as follows.

**111.4 Failure to comply**. Any person who shall continue any work after having been served with a stop work order, except such as that person is directed, by the City, to perform or remove a violation or unsafe condition, shall be liable to a fine of not less than one hundred (\$100.00) dollars or more than double the amount.

I. Subsection 113.3 of the International Fire Code is amended to read as follows.

**113.3** Work commencing before permit issuance. When work is started or proceeded prior to obtaining approval or required permits, the ordinary fees shall be doubled. The payment of such double fee shall not relieve any persons from fully complying with the requirement of this code in the execution of the work nor from any other penalties prescribed by this code.

**Sec. 13.01.030.** Amendments to the International Fire Code – Chapter 2, Definitions. The following local amendment to Chapter 2 of the International Fire Code, entitled "Definitions," is hereby adopted and incorporated into the International Fire Code:

A. The following definitions is added to Section 202 of the International Fire Code to read as follows:

**OUTDOOR STORAGE.** The storage of materials on-site which are not in transit.

**PROBLEMATIC FIRE PROTECTION SYSTEM.** A fire protection system that generates repeated preventable alarms.

**Sec. 13.01.040.** Amendments to the International Fire Code – Chapter 3, General Requirements. The following local amendment to Chapter 3 of the International Fire Code, entitled "General Requirements," is hereby adopted and incorporated into the International Fire Code:

A. A new subsection 308.1.6.3 is amended to read as follows:

308.1.6.3 Sky lanterns. The use of sky lanterns is prohibited.

AB. A new subsection 315.4.3 to read as follows:

**315.4.3 Idle Pallets.** Idle pallets shall be stored in accordance with Sections 315.4.3.1 through 315.4.3.4.

**315.4.3.1 Buildings protected with automatic sprinklers.** The storage of idle pallets shall be in accordance with NFPA 13 Table A12.12.1.1.

**315.4.3.2 Buildings without sprinkler protection.** The storage of idle pallets shall be in accordance with Table 315.4.3.2.

Table 315.4.3.2 Clearances<sup>1</sup> Between Storage and Buildings

Wall Construction Type	Openings	0-50 Pallets	51-200 Pallets	Over 200 Pallets
Masonry	None	5	5	10
Masonry	1 hour protected openings	5	10	20
Masonry	3/4 hour protected openings	10	20	30
Masonry	Non protected openings	20	30	50
Other		20	30	50

1. All distances measured in feet.

**315.4.3.3 Separation from other storage.** The storage of idle pallets shall be in accordance with Table 315.4.3.3.

**Table 315.4.3.3 Clearance to Other Storage** 

Pile Size	Minimum Distance <sup>1</sup>
0-50	20
51-200	30
Over 200	50

1. All distances measured in feet.

**315.4.3.4 Stacks.** Pallet stacks shall be arranged to form stable piles. Pile shall be limited to an area not greater than 400 square feet. A distance half the pile height or not less than 8 ft. shall separate stacks.

13.20.050. Amendments to the International Fire Code – Chapter 4, Emergency Planning and Preparedness. This section is reserved.

**13.20.060.** Amendments to the International Fire Code – Chapter 5, Fire Service Features. The following local amendments to Chapter 5 of the International Fire Code, entitled "Fire Service Features," are adopted and incorporated into the International Fire Code:

- A. Section 503 of the International Fire Code is adopted.
- B. Subsection 503.2.1 is amended to read as follows:
  - **503.2.1 Dimensions.** The following minimum dimensions shall apply for fire apparatus access roads:
  - 1. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, except for approved security gates in accordance with section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches.
    - 2. All fire apparatus access road routes shall be approved.
- C. Subsection 503.2.3 is amended to read as follows:
  - **503.2.3 Surface.** Facilities, buildings, or portions of buildings constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with asphalt, concrete, or other approved all-weather driving surface capable of supporting the imposed load of fire apparatus weighing at least 30 tons in accordance with the King County Road Standards.
- D. Subsection 503.2.5 is amended to read as follows:
  - **503.2.5 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround.
- E. Subsection 503.2.6 is amended to read as follows:
  - **503.2.6 Bridges and elevated surfaces.** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface shall be constructed and maintained in accordance with specifications established by the fire code official and the public works director, or their designees; at a minimum, however, the bridge or elevated surface shall be constructed and maintained in accordance with AASHTO Standard Specifications for Highway Bridges. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of 30 tons or more ton fire apparatus, the total imposed load to

be determined by the fire code official. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

- F. Subsection 503.2.7 of the International Fire Code is amended to read as follows:
  - **503.2.7 Grade.** Fire apparatus access roads shall not exceed 15 percent longitudinally and/or 6 percent laterally in grade. Approach and departure angle for fire access shall be as determined by the fire code official.
- G. A new subsection 503.2.9 is added to read as follows:
  - **503.2.9** Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, for 20 feet on either side of the operating nut the minimum road width shall be 26 feet and may be marked as a fire lane per Section 503.3.
- H. Subsection 503.3 is amended to read as follows:
  - **503.3 Marking.** Fire apparatus access roads shall be marked whenever necessary to maintain the unobstructed minimum required width of roadways. Subject to the fire code official's prior written approval, marked fire apparatus access roads, or fire lanes, may be established or relocated at the time of plan review, pre-construction site inspection, and/or post construction site inspection as well as any time during the life of the occupancy. Only those fire apparatus access roads established by the fire code official can utilize red marking paint and the term fire lane. Fire lanes shall be marked as directed by the fire code official with one or more of the following types of marking in accordance with the City of SeaTac Design and Construction Standards:
    - **503.3.1 Type 1.** Type 1 marking shall be installed to identify *fire lanes* on commercial and multi-family developments or as directed by the *fire code official*. The following shall apply to Type 1 marking:
    - Curbs shall be identifiable by red traffic paint with a 6 inch wide stripe on the top and front, extending the length of the designated fire lane.
    - Rolled curbs shall be identified by red traffic paint with a 6 inch wide stripe on the upper most portion of the curb, extending the length of the designated fire lane.
    - Lanes without curbs shall be identified by red traffic paint with a 6 inch wide stripe on the pavement, extending the length of the designated fire lane.
    - 4. The words "NO PARKING FIRE LANE" shall be in 3 inch stroke white letters 18 inches in height, and placed 8 inches measured perpendicular from the red paint stripe on the pavement. Locations and intervals will be designated by the fire code official; marking will not exceed 50 feet apart. In most cases, both sides of the access road shall be marked. Where long drives are to be marked, the repetition shall alternate sides of the drive.

**Exception:** Fire lanes installed prior to July 1, 2013, with fire lane stencil on the face of curb.

**503.3.2 Type 2.** Type 2 marking shall be installed to identify *fire lanes* in one- and two-family dwelling developments, turnarounds, or as directed by the *fire code official*. The following shall apply to Type 2 marking:

- 1. Type 2 marking requires metal signs stating "NO PARKING FIRE LANE" to be installed at intervals or locations designated by the fire code official; signage will not exceed 150 feet apart.
- 2. The signs shall measure 12 inches in width and 18 inches in height and have red letters on a white background. Bottom of sign shall be a minimum of 7 feet from the curb. Signs shall be nominally parallel to the road, facing the direction of travel.
- 3. The sign shall be installed on an approved metal post.

**Exception:** On construction sites, approved portable or temporary sign posts and bases may be used.

- 4. Where fire lanes are adjacent to buildings or structures and when approved or directed by the fire code official, the signs may be placed on the face of the building or structure.
- **503.3.3. Type 3.** Type 3 marking shall be installed to address situations where neither Type 1 or 2 marking are net effective or as directed by the fire code official.
- 1. Specific areas designated by the fire code official shall be marked with diagonal striping across the width of the fire lane. Diagonal marking shall be used in conjunction with painted curbs and/or edge striping and shall run at an angle of 30 to 60 degrees from one side to the other. These diagonal lines shall be in red traffic paint, parallel with each other, at least 6 inches in width, and 24 inches apart. Lettering shall occur as with Type 1 marking.
- I. Subsection 503.7 is added to read as follows:
  - **503.7 Establishment of fire lanes.** Fire lanes in conformance with this code shall be established by the Fire Chief or his/her authorized designee, and shall be in accordance with 503.7.1 through 503.7.9.
    - **503.7.1 Obstruction of fire lanes prohibited.** The obstruction of a designated fire lane by a parked vehicle or any other object is prohibited and shall constitute a traffic hazard as defined in State law and an immediate hazard to life and property.
    - **503.7.2 Existing fire lane signs and markings.** The following signs and markings shall be provided:
    - 1. Signs (minimum nine-inch by 16-inch) may be allowed to remain until there is a need for replacement and at that time the sign shall the requirements of section 503.3.2

- 2. Markings may be allowed to remain until there is a need for repainting and at that time the provisions outlined in 503.3 shall be complied with.
- **503.7.3 Maintenance.** Fire lane markings shall be maintained at the expense of the property owner(s) as often as needed to clearly identify the designated area as being a fire lane.
- **503.7.4 Towing notification.** At each entrance to property where fire lanes have been designated, signs shall be posted in a clearly conspicuous location and shall clearly state that vehicles parked in fire lanes may be impounded, and the name, telephone number, and address of the towing firm where the vehicle may be redeemed.
- **503.7.5 Responsible property owner.** The owner, manager, or person in charge of any property upon which designated fire lanes have been established shall prevent the parking of vehicles or placement of other obstructions in such fire lanes.
- **503.7.6 Violation Penalty.** Any person who fails to mark or maintain the marking of a designated fire lane as prescribed herein, or who obstructs or allows the obstruction of a designated fire lane, other than the parking of a vehicle, shall be deemed to have committed a Class 2 civil infraction. The penalty for violation of this section shall be a maximum monetary penalty of one hundred twenty-five dollars (\$125.00), not including statutory assessments.
- **503.7.7 Violation Civil penalty.** In addition to, or as an alternate to, the penalties specified above, the City is authorized to enforce all provisions of this chapter, specifically including civil penalties, pursuant to Chapter 1.15 SMC.
- **503.7.8 Impoundment.** Any vehicle or object obstructing a designated fire lane is declared a traffic hazard and may be abated without prior notification to its owner by impoundment pursuant to the applicable State law. The owner or operator shall be responsible for all towing and impound charges.
- J. A new subsection 503.8 is added to read as follows:
  - **503.8 Commercial and Industrial Developments.** The *fire apparatus access roads* serving commercial and industrial developments shall be in accordance with Sections 503.8.1 through 503.8.3.
    - **503.8.1 Buildings exceeding three stories or 30 feet in height.** Buildings or facilities exceeding 30 feet or three stories in height shall have at least two means of fire apparatus access for each structure.
    - **503.8.2 Buildings exceeding 62,000 square feet in area.** Buildings or facilities having a gross *building area* of more than 62,000 square feet shall be provided with two separate and *approved fire apparatus access roads*.

**Exception:** Projects having a gross *building area* of up to 124,000 square feet that have a single *approved* fire apparatus access road when all buildings area equipped throughout with *approved automatic sprinkler systems*.

**503.8.3 Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses <u>or as approved by the fire code official and the fire chief.</u>

- K. A new subsection 503.9 is added to read as follows:
  - **503.9 Aerial fire apparatus roads.** The *fire apparatus access roads* that accommodate aerial fire apparatus shall be in accordance with Sections 503.9.1 through 503.9.3.
    - **503.9.1 Where required.** Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department access shall be provided with *approved fire apparatus access roads* that are capable of accommodating fire department aerial apparatus.
    - **503.9.2 Width.** Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of building more than 30 feet in height.
    - **503.9.3 Proximity to building.** At least one of the required access routes meeting this condition shall be positioned parallel to one entire side of the building. The location of the parallel access route shall be approved.
- L. A new subsection 503.10 is added to read as follows:
  - **503.10 Multi-family residential developments.** The *fire apparatus access roads* serving multi-family residential developments hall be in accordance with Sections 503.10.1 through 503.10.32.
    - **503.10.1 Projects having more than 100 dwelling units.** Multi-family residential projects having more than 100 *dwelling units* shall be provided with two separate and *approved fire apparatus access roads*.

**Exception:** Projects having up to 200 *dwelling units* may have a single *approved* fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with *approved automatic sprinkler systems* installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**503.10.2 Projects having more than 200 dwelling units.** Multi-family residential projects having more than 200 *dwelling units* shall be provided with two separate and *approved fire apparatus access roads* regardless of whether they are equipped with an *approved automatic sprinkler system*.

**503.10.3 Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses or as approved by the *fire code official* and *fire chief*.

M. A new subsection 503.11 is added to read as follows:

**503.11 One-** and **Two-family residential developments with more than 30 dwelling units.** The *fire apparatus access roads* serving one<sub>-</sub> and two-family residential developments with more than 30 dwelling units shall be in accordance with Sections 503.11.1 and 503.11.2.

**503.11.1** Projects having more than **30** dwelling units. Developments of one- or two-family dwellings where the number of dwelling units exceed 30 shall be provided with <u>two</u> separate and approved fire apparatus access roads and shall meet the requirements of Section 503.8.3.

#### **Exceptions:**

- Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the *International Fire Code*, access from two directions shall not be required.
- 2. The number of dwelling units on a single *fire apparatus access road* shall not be increased unless *fire apparatus access roads* will, within a reasonable time, connect with future development, as determined by the *fire code official*.

**503.11.2 Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses or as approved by the *fire code official* and *fire chief*.

N. A new subsection 503.12 is added to read as follows:

**503.12 Underground structures.** Installation of underground structures under or within 10 feet of *fire apparatus access roads* shall be designed using *approved* criteria. The criteria shall accommodate for the loading of fire department aerial apparatus unless otherwise *approved*.

O. Subsection 507.5.2 is amended to read as follows:

**507.5.2. Inspection, testing and maintenance.** Private fire hydrant systems shall be subject to annual testing. Fire hydrant systems shall be maintained in an

- operative condition at all times and shall be repaired where defective. Additions, repairs, alterations, and servicing shall comply with approved standards.
- $\underline{PO}$ . A new subsection 507.5.32.1 is added to read as follows:
  - **507.5.32.1. Records.** Records of all system inspections, tests and maintenance required by the referenced standard shall be maintained on the premises for three years; copies shall be delivered to the fire code official within 30 calendar days of each test, inspection, or maintenance of the system.
- QP. A new subsection 507.5.6 is amended to read as follows:
  - **507.5.6. Physical protection.** Where fire hydrants are subject to impact by a motor vehicle, guard posts shall be designed and installed in accordance with the local water purveyor's design and construction standards.
- RQ. A new subsection 507.5.7 is amended to read as follows:
  - **507.5.7. Fire hydrant.** Fire hydrants shall be designed and installed in accordance with the local water purveyor's design and construction standards.
- SR. A new subsection 507.5.8 is amended to read as follows:
  - **507.5.8. Backflow prevention.** All private fire systems shall be isolated by an approved method from the local water purveyor.
- **TS.** A new subsection 507.6 is amended to read as follows:
  - **507.6.** Capacity for residential areas. All hydrants installed in single family residential areas shall be capable of delivering 1,500 gpm fire flow over and above average maximum demands at the farthest point of the installation.
- UT. A new subsection 507.7 is amended to read as follows:
  - **507.7. Spacing.** The spacing of hydrants shall be in accordance with Sections 507.7.1 through 507.7.5.
    - **507.7.1. Single family.** The maximum fire hydrant spacing serving single family residential areas shall be 600 feet.
    - **507.7.2. Commercial, industrial and multi-family.** The maximum fire hydrant spacing serving commercial, industrial, multi-family or other areas shall be 300 feet.
    - **507.7.3. Medians.** Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines hydrants shall be provided on each side of the street and be arranged on an alternating basis.
    - **507.7.4. Arterials.** Where arterial streets are provided with four or more traffic lanes hydrants shall be provided on each side of the street and be arranged on an alternating basis.

**507.7.5. Transportation**. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at a spacing not to exceed 1,000 feet to provide for transportation hazards.

 $\forall \underline{U}$ . A new subsection 507.8 is amended to read as follows:

**507.8. Required hydrants.** The number of hydrants required for a property shall be based on the calculated fire flow. The first hydrant will be calculated for up to 1,500 gpm. An additional hydrant is required for every 1,000 gpm, or fraction thereof. The required hydrants shall be within 600 feet of the property on a fire apparatus road, as measured by an approved method.

₩V. A new subsection 507.9 is amended to read as follows:

**507.9. Notification.** The owner of property on which private hydrants are located and the public agencies that own or control public hydrants must provide the *fire code official* with the following written service notifications in accordance with 507.9.1 and 507.9.2.

**507.9.1. In-service notification.** The *fire code official* shall be notified when any newly installed hydrant is placed into service.

**507.9.2. Out-of-service notifications.** Where any hydrant is out of service or has not yet been placed in service, the hydrant shall be identified as being out of service and shall be appropriately marked as out of service, by a method *approved* by the *fire code official*.

XW. A new subsection 507.10 is amended to read as follows:

**507.10. Water main standards.** The installation of water mains shall be in accordance with 507.10.1 and 507.10.2.

**507.10.1. Minimum pipe size.** All water mains serving fire hydrants shall be eight (8) inches in diameter for dead-end mains and six (6) inches inside diameter for circulating mains.

**Exception:** Hydrant leads less than fifty (50) feet in length may be six (6) inches in diameter.

**507.10.2. Adopted standards.** All water mains shall meet applicable engineering and health standards adopted by the State of Washington or the water purveyor.

4X. A new subsection 507.11 is amended to read as follows:

**507.11.** Water purveyor authority. Nothing in this section shall be construed to prohibit water purveyors from imposing more stringent requirements for the construction of water mains and fire hydrants.

**13.20.070.** Amendments to the International Fire Code – Chapter 6, Building Services and Systems. The following local amendments to Chapter 6 of the International Fire Code, entitled "Building Services and Systems," are hereby adopted and incorporated into the International Fire Code:

- A. Subsection 606.6 with the following:
  - **606.6. Testing of equipment.** Refrigeration equipment and systems having a refrigerant circuit more than 220 pounds of Group A1 or 30 pounds of any other group refrigerant shall be subject to periodic testing in accordance with Section 606.6.1. A written record of the required testing shall be maintained on the premises for a minimum of three years; a copy shall be submitted to the *fire code official* within 30 calendar days of the testing; and a label or tag shall be affixed to the individual system identifying the date of the testing. Tests of emergency devices or systems required by this chapter shall be conducted by persons trained and qualified in refrigeration systems.
- B. Subsection 609.2 is amended to add the following two subsections to read as follows:
  - **609.2.2. Permit Required.** Permits shall be required as set forth in Section 105.6.
  - **609.2.3. Approved drawing.** The stamped and approved cook line drawing shall be displayed adjacent to the suppression system pull station prior to the final inspection.
- C. Subsection 609.3.3.3 is amended to read as follows:
  - **609.3.3.3 Records.** Records for inspections shall state the individual and company performing the inspection, a description of the inspection and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning, maintained on the premises for a minimum of three years; a copy shall be sent to the *fire code official* within 30 days of the inspection or cleaning; and a label or tag shall be affixed to the individual system identifying the date of the inspection and/or cleaning.
- **13.20.080.** Amendments to the International Fire Code Chapter 7, Fire-Resistance-Rated ConstructionFire and Smoke Prevention Features. The following local amendments to Chapter 7 of the International Fire Code, entitled "Fire-Resistance-Rated ConstructionFire and Smoke Prevention Features," are hereby adopted and incorporated into the International Fire Code:
- A. Subsection 703.4 is amended to read as follows:
  - **703.4. Testing.** Horizontal, vertical sliding and rolling fire doors shall be inspected and tested annually to confirm proper operation and full closure. A written record shall be maintained on the premises for a minimum of three years; a copy shall be sent to the *fire code official* within 30 calendar days of the inspection or test; and a label or tag shall be affixed to the individual assembly identifying the date of scheduled confidence test.

**13.20.090.** Amendments to the International Fire Code – Chapter 9, Fire Protection Systems. The following local amendments to Chapter 9 of the International Fire Code, entitled "Fire Protection Systems," are hereby adopted and incorporated into the International Fire Code:

A. Subsection 901.6.2 is amended to read as follows:

**901.6.2. Records.** Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for three years; a copy shall be sent to the *fire code official* within 30 calendar days of each test, inspection, or maintenance of the system; and a label or tag shall be affixed to the individual system identifying the date of the scheduled confidence test.

B. Subsection 901.11 is added to read as follows:

**901.11.** Emergency contacts. It shall be the responsibility of the owner of a any monitored fire protection system to provide and maintain a minimum of three emergency contacts that are capable of responding to the system location with their monitoring company.

<u>CB</u>. The following term is added to subsection 902.1:

#### PROBLEMATIC FIRE PROTECTION SYSTEM.

CD. Subsection 903.2 of the International Fire Code is amended to read as follows:

**903.2 Where required.** An automatic sprinkler system shall be provided for when one of the following conditions exist:

1. In all buildings without adequate fire flow as required by this code.

**Exception:** Miscellaneous Group U Occupancies.

2. All new buildings and structures regulated by the International Building Code 6,000 square feet and greater and requiring 2,000 gallons per minute or more fire flow, or with a gross floor area of 10,000 or more square feet, or where this code provides a more restrictive floor/fire area requirement, and shall be provided in all locations or where described by this code.

**Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries, and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1 hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2 hour *horizontal assemblies* constructed in accordance with Section 712 of the *International Building Code*, or both.

3. Where this code requires the installation of an automatic sprinkler system to protect an occupancy within an otherwise non-sprinklered building, then automatic sprinkler protection will be required throughout the entire building.

- 4. When the required fire apparatus access roadway grade is 12 percent or greater.
- DE. A new subsection 903.2.9.3 is added to read as follows:

**903.2.9.3 Speculative use warehouses.** Where the occupant, tenant, or use of the building or storage commodity has not been determined or it is otherwise a speculative use warehouse or building, the automatic sprinkler system shall be designed to protect not less than Class IV non-encapsulated commodities on wood pallets, with no solid, slatted, or wire mesh shelving, and with aisles that are 8 feet or more in width and up to 20 feet in height.

<u>EF.</u> A new subsection 903.3.8 is added to read as follows:

**903.3.8. Check valve.** All automatic sprinkler system risers shall be equipped with a check valve.

 $\not\models \underline{G}$ . A new subsection 903.7 is added to read as follows:

**903.7 Riser Room Access.** All risers shall be located in a dedicated room with an exterior door, interior lighting and heat.

GH. Subsection 907.1.3 is amended to read as follows:

**907.1.3 Equipment.** Systems and their components shall be listed and approved for the purpose for which they are installed. All new alarm systems shall be addressable. Each device shall have its own address and shall annunciate individual addresses at a UL Central Station.

I. A new subsection 907.6.3 is amended to read as follows:

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

**Exception:** Special initiating devices that do not support individual device identification.

J. A new subsection 907.8.5.1 is ameneded to read as follows:

**907.8.5.1.** Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for three years; a copy shall be sent to the *fire code official* within 30 calendar days of each test, inspection, or maintenance of the system; and a label or tag shall be affixed to the individual system identifying the date of the scheduled confidence test.

HK. A new subsection 907.<del>10</del>-11 is added to read as follows:

**907.1011.** Latched alarms. All signals shall be automatically "latched" at the alarm panel until their operated devices are returned to normal condition, and the alarm panel is manually reset.

<u>↓</u>. A new subsection 907.<del>21</del>\_12 is added to read as follows:

**907.21**—**12 Resetting.** All fire alarm panels shall be reset only by an approved person.

**907.2112.1. Reset Code.** The reset code for the fire alarm panel or keypad shall be 3-7-1-2-3-4. The reset code shall not be changed without approval of the fire code official.

 $\frac{JM}{M}$ . A new subsection 907.22 13 is added to read as follows:

**907.22**—<u>13</u> Fire Alarm Control Panel. All fire alarm control panels shall be located in the riser room designed and installed in accordance with Section 903.7 or an approved location.

KN. Subsection 909.20.2 is amended to read as follows:

**909.20.2** Written record. The records shall include the date of the maintenance, identification of the servicing personnel and notification of any unsatisfactory condition and the corrective action taken, including parts replacement. The written record of smoke control system testing and maintenance shall be maintained on the premises for three years; copied copy shall be sent to the fire code official within 30 days of each test or maintenance of the system; and a label or tag shall be affixed to the individual system identifying the date of the scheduled testing.

<u>LO</u>. Subsection 912.4-5 is amended to read as follows:

**912.4**—**5 Signs.** Fire department connections shall be clearly identified in an approved manner.

All fire department connections shall have an approved sign attached below the Siamese clapper. The sign shall specify the type of water-based fire protection system, the structure, and the building areas served.

**13.20.100.** Amendments to the International Fire Code – Chapter 11, Fire Safety Requirements for Existing Buildings. The following local amendments to Chapter 11 of the International Fire Code, entitled "Fire Safety Requirements for Existing Buildings," are hereby adopted and incorporated into the International Fire Code:

A. A new subsection 1103.5.3 is added to read as follows:

**1103.5.3 Substantial Alterations.** The provisions of this chapter shall apply to substantial alterations to existing buildings regardless of use when a substantial alteration occurs in a structure equaling 10,000 or greater square feet. For the purpose of this section, a substantial alteration shall be defined as an alteration that costs 50% or more of the current assessed value of the structure and impacts more than 50% of the gross floor area.

B. A new subsection 1103.7.8 as follows:

**1103.7.8 Fire alarm control unit.** If an existing fire alarm control unit is replaced with identical equipment it shall be considered maintenance.

**13.20.110.** Amendments to the International Fire Code – Chapter 80, Reference Standards. The following local amendments to Chapter 80 of the International Fire Code, entitled "Reference Standards," are hereby adopted and incorporated into the International Fire Code:

A. Section NFPA of the International Fire Code is amended by modifying the Standard reference number dates of publication as follows:

<u>13-<del>13</del>16</u>	Installation of Sprinkler Systems
13D-1316	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes
<u>13R-<del>13</del>16</u>	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
<u>20-<del>13</del>16</u>	Installation of Stationary Pumps for Fire Protection
<u>24-<del>13</del>16</u>	Installation of Private Fire Service Mains and Their Appurtenances
72- <del>13</del> <u>16</u>	National Fire Alarm and Signaling Code
<u>110-<del>13</del>16</u>	Emergency and Standby Power Systems
<u>111-<del>13</del>16</u>	Stored Electrical Energy Emergency and Standby Power Systems
<u>720-<del>12</del>15</u>	Installation of Carbon Monoxide (CO) Detection and Warning Equipment

**13.20.120.** Amendments to the International Fire Code – Appendix B, Fire-Flow Requirements for Buildings. The following local amendments to Appendix B to the International Fire Code, entitled "Fire-Flow Requirements for Buildings," are hereby adopted and incorporated into the International Fire Code:

- A. Subsection B103.1 is amended to read as follows:
  - **B103.1 Increases.** The fire chief is authorized to increase the fire flow requirements where exposures could be impacted by fire. An increase shall not be more than twice that required for the building under consideration.
  - **B103.1.1 One- and two-family dwellings.** The fire chief is authorized to increase the fire flow requirements by 500 gallons per minute for homes less than 10 feet apart measured from the face of the foundation.
- B. Subsection B105.1 is amended to read as follows:
  - **B105.1 One- and two-family dwellings.** Fire-flow requirements for one- and two-family *dwellings* shall be in accordance with Sections B105.1.1 through B105.1.3.
    - **B105.1.1 Buildings not exceeding 3,600 square feet.** The minimum fire-flow and flow duration requirements shall be 1,000 gallons per minute for 1 hour.

**Exception:** A reduction in required fire-flow of 50 percent, as *approved*, is allowed when the building is equipped with an *approved automatic sprinkler system*.

**B105.1.2** Buildings greater than 3,600 square feet and less than 4,800 square feet. The minimum fire-flow and flow duration requirements shall be 1,500 gallons per minute for 2 hour.

**Exception:** A reduction in required fire-flow of 50 percent, as *approved*, is allowed when the building is equipped with an *approved automatic sprinkler system*.

**B105.1.3 Buildings 4,800 square feet and greater.** The minimum fireflow and flow duration requirements for shall not be less than that specified in Table B105.1(2).

**Exception:** A reduction of fire-flow and flow duration to 1,000 gallons per minute for 1 hour, as *approved*, is allowed when the building is equipped with the following;

- 1. An approved automatic sprinkler system
- 1-hour fire resistant rated exterior walls tested in accordance with ASTM E 119 or UL 263 with exposure on the exterior side and projections with 1-hour underside protection, fire blocking installed from the wall top plate to the underside of the roof sheathing and no gable vent openings.

**Exception:** Walls with a distance greater than 11' to the nearest exposure or face an unbuildable lot, tract or buffer. The distance shall be measured at right angles from the face of the wall.

**B105.2** Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family *dwellings* shall be as specified in Table B105.1(2).

**Exception:** A reduction in required fire-flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system. The resulting fire-flow shall not be less than 1,500 gallons per minute for the prescribed duration as specified in Table B105.1(2).

**B105.2.1 Tents and Membrane structures.** No fire flow is required for tents and membrane structures.

**B105.2.2 Accessory residential Group U buildings.** Accessory residential Group U buildings shall comply with the requirements of B105.1.

C. Section B105 is amended by deleting the following:

<u>Table B105.1(1)</u> Required Fire-Flow for One- and Two-family Dwellings, Group R-3 and R-4 Buildings and Townhouses

**Table B105.2** Required Fire-Flow for Other than One- and Two-family Dwellings, Group R-3 and R-4 Buildings and Townhouses

## Chapter 13.160 MECHANICAL CODE

#### Sections:

13.160.010 International Mechanical Code.

13.160.020 Copy on file.

#### 13.160.010 International Mechanical Code.

The 2015 Edition of the International Mechanical Code, as published by the International Code Council, as amended by the Washington State Building Code Council and as published in Chapter 51-52 WAC, as now or hereafter amended, is adopted. (Ord. 13-1009 § 3: Ord. 10-1018 § 8 (part): Ord. 07-1012 § 3: Ord. 04-1008 § 3)

#### 13.160.020 Copy on file.

At least one (1) copy of the adopted editions of the International Mechanical Code shall be on file in the office of the Building Official on behalf of the City Clerk. (Ord. 10-1018 § 8 (part): Ord. 04-1008 § 3)

## Chapter 13.170 PLUMBING CODE

#### Sections:

13.170.010 Uniform Plumbing Code.

13.170.020 Copy on file.

#### 13.170.010 Uniform Plumbing Code.

The <u>20122015</u> Edition of the Uniform Plumbing Code, as published by the International Association of Plumbing and Mechanical Officials, as amended by the Washington State Building Code Council and as published in Chapter 51-56 WAC, as now or hereafter amended, is adopted.

#### Exception:

- a. The International Plumbing Code, as published by the International Code Council, may be used as an approved alternate to the Uniform Plumbing Code per SMC 13.100.040 as an alternate material, design and method of construction.
- When an approved alternate plumbing code is utilized, the entire plumbing installation shall
  be installed and governed under provisions of the alternate code and the permit documents
  shall clearly state which code will be used.

\_(Ord. 13-1009 § 4: Ord. 10-1018 § 9 (part): Ord. 07-1012 § 4: Ord. 04-1008 § 3)

## 13.170.020 Copy on file.

At least one (1) copy of the adopted editions of the International Plumbing Code and Plumbing Code Standards shall be on file in the office of the Building Official on behalf of the City Clerk. (Ord. 10-1018 § 9 (part): Ord. 04-1008 § 3)

# Chapter 13.180 ELECTRICAL CODE

#### Sections:

13.180.010	Adoption of the National Electrical Code.
13.180.020	Electricians and electrical installations.
13.180.030	The Washington Cities Electrical Code.
13.180.040	Amusement rides.
13.180.050	Enforcement.

## 13.180.010 Adoption of the National Electrical Code.

A. The <u>most current</u> 2008 Edition of the National Electrical Code (NFPA 70 – 2008) <u>approved by the Washington State Building Code Council,</u> including Annexes A, B, and C is hereby adopted by reference, as now or hereafter amended.

B. Pursuant to an interlocal agreement entered into by and between the City and the Port of Seattle, pursuant to Resolution No. 00-022 and Port Resolution No. 3445, respectively, effective January 1, 2000, the City recognizes concurrent authority of the Port to administer, implement, and enforce the National Electrical Code recited in subsection (A) of this section and relinquishes any and all jurisdiction, including but not limited to that set forth in RCW 19.28.070, over development projects on Port-owned property within the City which are for airport uses, as that term is defined in the September 4, 1997, interlocal agreement between the City and the

Port. In the event the State of Washington or the Director of Department of Labor and Industries does not grant power to, or acknowledge power of, the Port of Seattle to enforce the provisions of Chapter 19.28 RCW, or conduct electrical inspections thereunder, the City defers to the inspection authority of the Director of Labor and Industries as to all matters involving such Port projects on Port property. (Ord. 13-1009 § 5 (part): Ord. 10-1001 § 1 (part): Ord. 05-1013 § 1: Ord. 04-1008 § 3)

#### 13.180.020 Electricians and electrical installations.

Chapter 19.28 RCW, as now in effect, and as may subsequently be amended, is adopted by reference to establish regulations pertaining to electricians and electrical installations, except that "Department" shall mean the City Department of Community and Economic Development, and "Director" shall mean the Director of the Department of Community and Economic Development, unless otherwise indicated by the context. (Ord. 13-1009 § 5 (part): Ord. 10-1001 § 1 (part): Ord. 04-1008 § 3)

## 13.180.030 The Washington Cities Electrical Code.

Those additional codes, manuals and reference works referred to and the regulations contained in the Washington Cities Electrical Code, as now in effect and as may subsequently be amended, updated, or issued as new editions, pursuant to the Washington Cities Electrical Code, are hereby adopted by reference to establish safety standards in installing electric wires and equipment and to provide administrative rules. (Ord. 13-1009 § 5 (part): Ord. 10-1001 § 1 (part): Ord. 04-1008 § 3)

## 13.180.040 Amusement rides.

A. Chapter 67.42 RCW, as now in effect and as may subsequently be amended, is adopted by reference to establish regulations pertaining to amusement rides, with the exception of the fees of RCW 67.42.060. The term "Department" shall mean the City Department of Community and Economic Development, and "Director" shall mean the Director of the Department of Community and Economic Development, unless otherwise indicated by the context.

B. Those additional codes, manuals and reference works referred to and the regulations contained in Chapter 296-403A WAC, as now in effect and as may subsequently be amended, updated, or issued as new editions, pursuant to RCW 67.42.050, are hereby adopted by reference to establish safety standards in installing and operating amusement rides and to provide administrative rules, with the exception of the fees of WAC 296-403A-150. (Ord. 13-1009 § 5 (part): Ord. 10-1001 § 1 (part): Ord. 04-1008 § 3)

# 13.180.050 Enforcement.

In addition to any and all rights of inspection, access and enforcement contained in the National Electrical Code, the Washington Cities Electrical Code, and the statutes and regulations adopted by this chapter, the City is authorized to enforce all provisions of this chapter pursuant to Chapter 1.15 SMC, as it presently exists and as it may subsequently be amended. (Ord. 13-1009 § 5 (part): Ord. 10-1001 § 1 (part): Ord. 04-1008 § 3)

# Chapter 13.210 PROPERTY MAINTENANCE CODE

#### Sections:

13.210.010 International Property Maintenance Code.

13.210.020 Copy on file.

### 13.210.010 International Property Maintenance Code.

The 2012 2015 Edition of the International Property Maintenance Code ("IPMC"), as published by the International Code Council, is adopted to be the property maintenance code of the City of SeaTac, with the following exceptions amendments:

- A. IPMC Section 101.1 shall reflect that the name of the jurisdiction is the City of SeaTac;
- B. IPMC Section 102.3 is amended to delete all references to the International Plumbing Code. The last sentence in IPMC 102.3 is hereby deleted in its entirety.
- C. IPMC 103.5 is hereby repealed in its entirety.
- D. IPMC Section 111 is hereby repealed in its entirety.
- E. IPMC Section 112.4 is hereby repealed in its entirety.
- F. IPMC Section 201.3 is amended to delete references to the International Plumbing Code and the International Zoning Code.
- G. The first sentence of IPMC 302.4 is hereby repealed in its entirety.
- H. The first sentence of IPMC Section 304.14 is hereby amended to read as follows:

At all times, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any other areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device in good working condition.

I. The first sentence of IPMC Section 602.3 is hereby amended to read as follows:

Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units, on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat at all times to maintain a temperature of not less than 68°F (20°C) in all habitable rooms, bathrooms, and toilet rooms.

J. The first sentence of IPMC 602.4 is hereby amended to read as follows:

Indoor occupiable work spaces shall be supplied with heat at all times to maintain a temperature of not less than 65°F (18°C) during the period the spaces are occupied.

A.K References to the Board of Appeals in Section 111 shall be deemed to refer to the Hearing Examiner system of Chapter 1.20 SMC.

B. M. Subsection 301.3, Vacant buildings structures and land, is repealed in its entirety and replaced by the following:

301.3 Vacant <u>Buildings Structures</u>. All vacant <u>buildings structures</u> and premises thereof must comply with this Code. Vacant <u>buildings structures</u> shall be maintained in a clean, safe, secure and sanitary condition provided herein so as not to cause a blighting problem or otherwise adversely affect the public health, safety or quality of life.

301.3.1 Appearance. All vacant <u>buildings</u> <u>structures</u> must appear to be occupied <u>or shall be secured as specified herein.</u>, <u>or appear able to be occupied with little or no repairs.</u>

301.3.2 Security. All vacant buildings structures must be secured against outside entry at all times. Security shall be by the normal building amenities such as windows and doors having adequate strength to resist intrusion. All doors and

windows must remain locked. There shall be at least one operable door into every building and into each housing unit. Exterior walls and roofs must remain intact without holes.

301.3.2.1 Architectural (Cosmetic) Structural panels. Architectural structural panels may be used to secure windows, doors and other openings provided they are cut to fit the opening and match the characteristics of the building.

Architectural panels may be of exterior grade finished plywood or Medium

Density Overlaid plywood (MDO). that is painted to match the building\_exterior or covered with a reflective material such as plexi-glass.

Exception. Untreated plywood or similar structural panels may be used to secure windows, doors and other openings for a maximum period of 30 days.

301.3.2.2 Security fences. Temporary construction fencing shall not be used as a method to secure a building structure from entry for a period exceeding 30 days.

Exception. Temporary construction fencing may be used for a maximum period of 30 days.

301.3.3 Weather protection. The exterior roofing and siding shall be maintained as required in Section 304.

301.3.4 Fire Safety.

301.3.4.1 Fire protection systems. All fire suppression and alarms systems shall be maintained in a working condition and inspected as required by the Fire Department.

301.3.4.2 Flammable liquids. No vacant <u>building structure</u> or premises or portion thereof shall be used for the storage of flammable liquids or other materials that constitute a safety or fire hazard.

301.3.4.3 Combustible materials. All debris, combustible materials, litter and garbage shall be removed from vacant buildings-structures, their accessory

buildings and adjoining yard areas. The <u>building structure</u> and premises shall be maintained free from such items.

301.3.4.4 Fire inspections. Periodic fire department inspections may be required at intervals set forth by the fire chief or his designee.

301.3.5 Plumbing fixtures. Plumbing fixtures connected to an approved water system, an approved sewage system, or an approved natural gas utility system shall be installed in accordance with applicable codes and be maintained in sound condition and good repair or removed and the service terminated in the manner prescribed by applicable codes.

301.3.5.1 Freeze protection. The <u>building's structure's</u> water systems shall be protected from freezing.

301.3.6 Electrical. Electrical service lines, wiring, outlets or fixtures not installed or maintained in accordance with applicable codes shall be repaired, removed or the electrical services terminated to the <u>building structure</u> in accordance with applicable codes.

301.3.7 Heating. Heating facilities or heating equipment in vacant buildings structures shall be removed, rendered inoperable, or maintained in accordance with applicable codes.

301.3.8 Interior floors. If a hole in a floor presents a hazard, the hole shall be covered and secured with three-quarter (3/4) inch plywood, or a material of equivalent strength, cut to overlap the hole on all sides by at least six (6) inches.

301.3.9 Termination of utilities. The code official may, by written notice to the owner and to the appropriate water, electricity or gas utility, request that water, electricity, or gas service to a vacant <u>building structure</u> be terminated or disconnected.

301.3.9.1 Restoration of Service. If water, electricity or gas service has been terminated or disconnected pursuant to Section 313.9, no one except the utility may take any action to restore the service, including an owner or other private

party requesting restoration of service until written notification is given by the code official that service may be restored.

301.3.10 Notice to person responsible. Whenever the code official has reason to believe that a building structure is vacant, the code official may inspect the building structure and premises. If the code official determines that a vacant building structure violates any provision of this section, the code official shall notify in writing, the owner of the building structure, or real property upon which the building structure is located, or other person responsible, of the violations and required corrections and shall be given a time frame to comply.

301.3.10.1 Alternate requirements. The requirements and time frames of this section may be modified under an approved Plan of Action Correction

Agreement. Within 30 days of notification that a building structure or real property upon which the building structure is located, is in violation of this Section, an owner may submit a written Plan of Action proposed Correction

Agreement for the code official to review and approve if found acceptable. A Plan of Action Correction Agreement may allow:

- 1) Extended use of non-architectural panels
- 2) Extended use of temporary security fencing
- 3) Extended time before the demolition of a building structure is required
- 4) For substandard conditions to exist for a specific period of time, provided the building structure is secured in an approved manner. When considering a Plan of Action Correction Agreement, the building code official shall take into consideration the magnitude of the violation and the impact to the neighborhood.
- 301.3.11 Enforcement. Violations of this section shall be enforced according to the provisions and procedures of Chapter 1.15 of the SeaTac Municipal Code and subject to the monetary penalties contained therein.
- 301.3.11.1 Abatement. A <u>building structure</u> or structure accessory thereto that remains vacant and open to entry after the required compliance date is found

and declared to be a public nuisance. The code official is hereby authorized to summarily abate the violation by elosing-securing the building structure to unauthorized entry. The costs of abatement shall be collected from the owner in the manner provided by law.

301.3.11.2 Unsafe <u>buildings</u> <u>structures</u> and equipment. Any vacant <u>building</u> <u>structure</u> or equipment therein, declared unsafe is subject to the provisions of Section 108 and the demolition provisions of Section 110.

(Ord. 13-1009 § 7: Ord. 10-1018 § 10 (part): Ord. 07-1012 § 5: Ord. 04-1008 § 3)

## 13.210.020 Copy on file.

At least one (1) copy of the adopted edition of the International Property Maintenance Code shall be on file in the office of the Building Official on behalf of the City Clerk. (Ord. 10-1018 § 10 (part): Ord. 04-1008 § 3)

# Chapter 13.220 ENERGY CODE

#### Sections:

13.220.010 International Energy Conservation Code.

13.220.020 Copy on file.

# 13.220.010 International Energy Conservation Code.

The International Energy Conservation Code, 20122015 Edition, as amended by the Washington State Building Code Council and as published in Chapters 51-11C and 51-11R WAC, as now or hereafter amended, is adopted. (Ord. 13-1009 § 8 (part): Ord. 10-1018 § 11 (part): Ord. 07-1012 § 6: Ord. 04-1008 § 3)

## 13.220.020 Copy on file.

At least one (1) copy of the adopted edition of the International Energy Conservation Code shall be on file in the office of the Building Official on behalf of the City Clerk. (Ord. 13-1009 § 8 (part): Ord. 10-1018 § 11 (part): Ord. 04-1008 § 3)

# Chapter 13.240 SOUND TRANSMISSION CODE

#### Sections:

13.240.010	Sound Transmission Code.
13.240.020	Purpose.
13.240.030	Scope.
13.240.040	Application.
13.240.050	Definitions.
13.240.060	Design requirements.
13.240.070	Recognized standards.
13.240.080	Air leakage for all buildings.
13.240.090	SeaTac noise program areas.
13.240.100	Building requirements for a noise impact zone. level reduction of twenty-five (25) dB.
13.240.110_	Section 13.240.110 is hereby repealed in its entirety. Building requirements for a noise level
	reduction of thirty (30) dB.
13.240.120_	Section 13.240.120 is hereby repealed in its entirety. Building requirements for a noise level
	reduction of thirty-five (35) dB.

# 13.240.010 Sound Transmission Code.

The following Sound Transmission Code is hereby adopted as the Sound Transmission Code for the City. (Ord. 04-1008 § 3)

## 13.240.020 Purpose.

The purpose of this chapter is to safeguard life, health, property and public welfare by establishing minimum requirements regulating the design, construction, and/or setting on-site of buildings for human occupancy in the vicinity of Seattle-Tacoma International Airport as identified on the attached Noise Level Reduction Map (see Figure 13.240.090a). These sections are not intended to abridge any safety or health requirements required under any other applicable codes or ordinances. (Ord. 04-1008 § 3)

## 13.240.030 Scope.

The provisions of this chapter shall apply to all buildings or structures constructed or placed in use for human occupancy on sites within the vicinity of Seattle-Tacoma International Airport which have been included within the Port of Seattle Noise Remedy Program. This chapter is intended to supplement the provisions of the Washington State Building Codes as adopted and amended by the City of SeaTac. In the case of conflict between this chapter and any other applicable codes, the more restrictive requirements shall apply. (Ord. 04-1008 § 3)

#### 13.240.040 Application.

This chapter is applicable to all uses considered incompatible with airport operations. These uses include, but are not necessarily restricted to, the following:

A. New Structures. New structures shall be constructed to this code.

- 1. Dwellings, single and multifamily,
- 2. Hotels/motels,
- 3. Offices,
- 4. Schools,
- 5. Churches and other places of worship,
- 6. Theaters,
- 7. Hospitals and medical service providers,
- 8. Mercantile and food services, Sound Transmission Code requirement shall be considered on a caseby-case basis. The intent should be to fully meet all code requirements.

#### B. Existing Structures.

- 1. Additions, alterations, or repairs may be made to existing buildings or structures without making the entire building or structure comply with all the requirements of this chapter for new construction; provided, that the addition, alteration, or repair conforms to the requirements for a new building or structure. Additions shall be made to comply with the requirements of a new structure.
- 2. Any change of use in the occupancy or use of a building previously unapproved for human occupancy to human occupancy use or of one (1) previously unused for sleeping purposes to sleeping use shall not be permitted unless the building, structure or portion of the building complies with this chapter.
- 3. The plans and specifications shall show in sufficient detail all pertinent data and features of the building and the equipment and systems, as herein governed, including, but not limited to: exterior envelope component materials; STC ratings of applicable component assemblies; R-values of applicable

insulation materials; size and type of apparatus and equipment; equipment and system controls and other pertinent data to indicate conformance with the requirements herein. (Ord. 04-1008 § 3)

#### 13.240.050 Definitions.

- A. "Noise reduction coefficient (NRC)" is the arithmetic average of the sound absorption coefficients of a material at two hundred fifty (250), five hundred (500), one thousand (1,000), and two thousand (2,000) Hz.
- B. "Sound transmission class (STC)" is a single number rating for describing sound transmission loss of a wall, roof, floor, window, door, partition or other individual building components or assemblies.
- C. "Noise reduction level" is the decibels of sound decrease required. (Ord. 04-1008 § 3)

# 13.240.060 Design requirements.

The criteria of these sections establish the minimum requirements for acoustic design of the exterior envelope of buildings and for HVAC systems and their parts. These requirements shall apply to all buildings for human occupancy within the SeaTac Noise Program Areas. (Ord. 04-1008 § 3)

## 13.240.070 Recognized standards.

The standards listed below are recognized standards:

- A. ASTM E90 and E413, Laboratory Determination of Airborne Sound Transmission Class (STC).
- B. ASTM E497, Standard Practice for Installing Sound-Isolating Lightweight Partitions.
- C. ASTM C919, Standard Practice for the Use of Sealants in Acoustical Applications.
- D. ASTM E336, Airborne Sound Insulation Field Test.
  - 1. When an Airborne Sound Insulation Field Test is required, airborne sound insulation shall be determined according to the applicable Field Airborne Sound Transmission Loss Test procedures. All sound transmitted from the source to the receiving room shall be considered to be transmitted through the test partition.
  - 2. Field testing, when required, shall be done under the supervision of a professional acoustician who shall be experienced in the field of acoustical testing and engineering and who shall forward certified test results to the Building Official that the minimum sound insulation requirements stated above have been met.

E. Sound Transmission Control Systems. The generic systems as listed in the Fire Resistance Design Manual, the most recent editions, as published by the Gypsum Association, may be accepted where a laboratory test indicates that the requirements of SMC 13.24.090 are met by the system. (Ord. 04-1008 § 3)

# 13.240.080 Air leakage for all buildings.

A. The requirements of this section shall apply to the design of the exterior envelope of all buildings in the SeaTac Noise Program Area designed for human occupancy. The requirements of this section are not applicable to the separation of interior spaces from each other.

B. The exterior building envelope shall be sealed in accordance with the SeaTac Energy Code air leakage requirements for residential or nonresidential structures, as applicable. Other penetrations through the wall, floor, or roof/ceiling penetrations not specifically addressed in these sections shall be designed to limit sound transmission and shall have the same average laboratory sound transmission classification as required for doors.

C. An "Airborne Sound Insulation Field Test" in accordance with ASTM E336 may be required to support the installed design.

Sealants shall meet one (1) of the following specifications:

- 1. Federal Specification A-A-1556 (formerly TT-S-00227 and TT-S-00230).
- 2. Former Federal Specification TT-S-001543.
- 3. ASTM C-920. (Ord. 04-1008 § 3)

#### 13.240.090 SeaTac noise program areas.

Noise determination construction requirements detailed in this Sound Transmission Building Code shall be applied to new construction and additions of all structures, except for not normally inhabited portions of warehouses, storage buildings and similar structures as determined by the Building Official, within the designated program areas of the Port of Seattle's Noise Remedy Program. (See Figure 13.240.090a.) The applicable program areas are the Neighborhood Reinforcement Area and the Standard Insulation Area. Specific construction requirements for these two (2) areas are:

### A. Neighborhood Reinforcement Area.

- 1. Bedrooms must comply with SMC <u>13.240.120</u> which is designed to achieve a noise reduction level of thirty-five (35) dB.
- 2. All other living and working areas must comply with SMC <u>13.240.110</u> which is designed to achieve a noise reduction level of 30 dB.

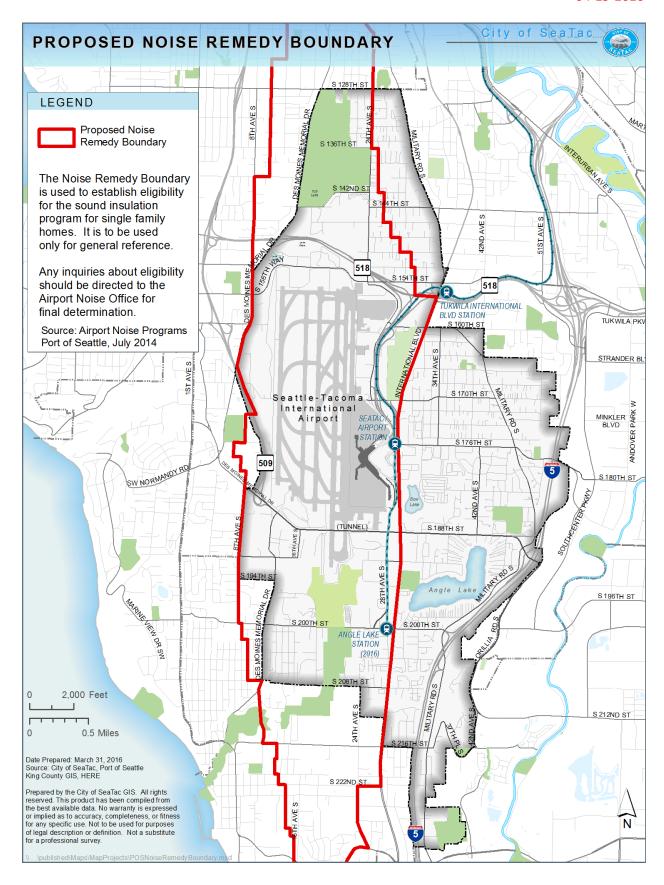
#### B. Standard Insulation Area.

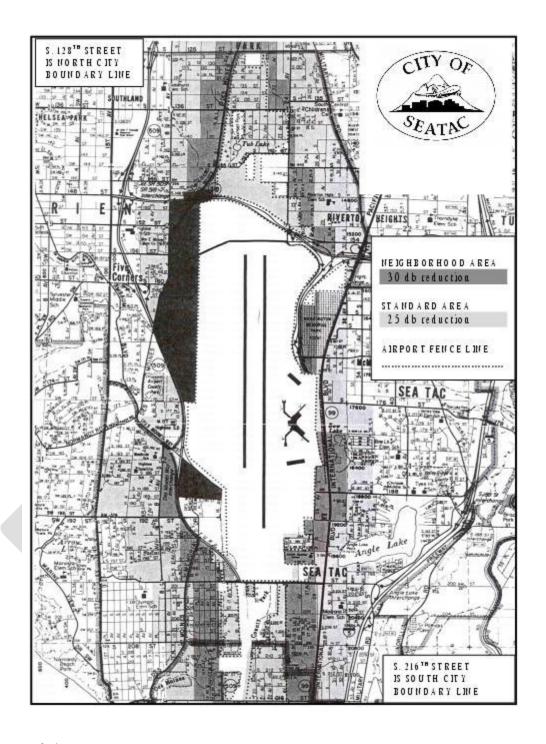
- 1. Bedrooms must comply with SMC 13.240.110 which is designed to achieve a noise reduction of thirty (30) dB.
- 2. All other living and working areas must comply with SMC 13.240.100 which is designed to achieve a noise reduction level of twenty-five (25) dB.



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(Ord. 04-1008 § 3)

13.240.100 Building requirements for a noise <u>impact zone.</u><del>level reduction of twenty-five (25) dB.</del>

A. Compliance. Compliance with this section shall be deemed to meet requirements for a minimum noise level reduction (NLR) of twenty-five (25) decibels.

#### B. Walls.

1. Exterior walls shall have a laboratory sound transmission class rating of at least STC-30. (See Figure 13.240.100a.)

Exception: Insulated walls that are constructed in accordance with the SeaTac Energy Code, or walls built in accordance with the following shall be considered to meet the STC-30 requirements:

- a. Masonry and concrete walls having a weight of at least twenty-five (25) pounds per square foot. These walls are not required to be furred out on the interior of the wall if at least one (1) surface of the concrete block wall is plastered.
- b. Stud walls at least four (4) inches in nominal depth shall be considered to meet the above requirements if built as defined below and to ASTM E497, Standard Practice for Installing Sound-Isolating Lightweight Partitions.
  - i. The interior surface of the exterior walls shall be covered with gypsum board or plaster at least one-half (1/2) inch thick.
  - ii. Insulation material shall be installed continuously throughout the cavity space, installed as specified in the SeaTac Energy Code.
  - iii. The outside of the wall shall be covered with a continuous layer of composition board, plywood, gypsum board, or a combination of these materials that is not less than one-half (1/2) inch thick.
  - iv. Outside sheathing panels shall be covered with a layer of building paper, or equivalent, installed in accordance with the City of SeaTac Building and Residential Codes.
  - v. Siding shall be installed over the building paper.

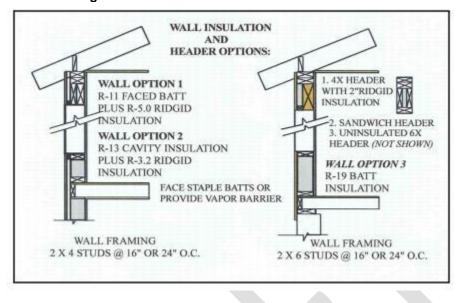


Figure 13.240.100a. WALL AND HEADER OPTIONS

## C. Windows.

1. Exterior windows shall have a laboratory sound transmission class rating of at least STC-28.

Exception: Windows meeting the SeaTac Energy Code shall be considered to meet the STC-28 requirement, or single pane windows that have glass at least three-sixteenths (3/16) inch thick.

All exterior windows shall be installed in accordance with the following requirements:

- a. The glass shall be sealed into the frame in an airtight manner with a nonhardening sealant or a soft elastomer gasket or gasket tape.
- b. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.
- c. The perimeter of the window frames shall be sealed to the exterior wall construction in accordance with SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

## D. Exterior Doors.

1. Doors other than as described in this section shall have a laboratory sound transmission class rating of at least STC-26.

Exception: Doors meeting the following criteria shall be considered as meeting the STC-26 rating:

- a. Exterior side-hinged doors that are solid-core wood, or insulated hollow metal, and that are not less than one and three-quarters (1 3/4) inch thick.
- b. Glass installed in the door that has a total area of more than two (2) square feet shall be sealed in an airtight manner with a nonhardening sealant or in a soft elastomer gasket or glazing tape.
- c. Exterior sliding glass doors shall be weather-stripped with an efficient airtight gasket system so as to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length.
- 2. All doors shall be installed to meet the following requirements:
  - a. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.
  - b. The perimeter of the door frames shall be sealed to the exterior wall construction in accordance with SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

### E. Roof/Ceiling.

1. Roof-ceiling assemblies shall have a laboratory sound transmission class rating of at least STC-39.

Exception: Roof-ceiling assemblies that are constructed in accordance with the SeaTac Energy Code, or roof-ceiling assemblies that are built in accordance with the following criteria, shall be considered to meet the STC-39 requirement:

- a. The roof deck shall be sheathed with not less than one-half (1/2) inch composition board, plywood or gypsum board sheathing, topped by roofing.
- b. Ceiling insulation shall be not less than R-38, and not less than the minimum requirements of the SeaTac Energy Code. The insulation shall be installed with not less than six (6) inches average air space between the insulation and the roof deck.

- c. Gypsum board or plaster ceilings shall be not less than one-half (1/2) inch thick.
- d. The ceiling shall be substantially airtight with a minimum of penetrations. Lighting fixtures penetrating the ceiling assembly shall be in accordance with the requirements in the SeaTac Energy Code. (See Figure 13.240.100b.) Other penetrations shall be treated in a similar manner to the requirements in the SeaTac Energy Code.

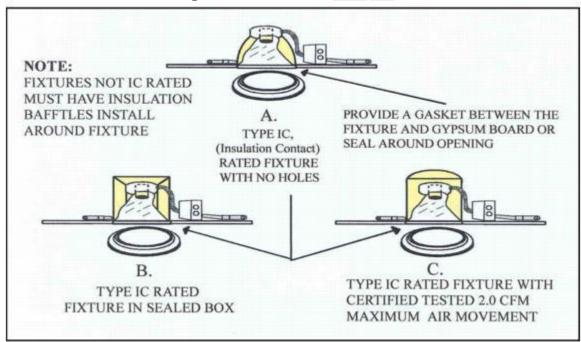


Figure 13.240.100b. LIGHT FIXTURES

- 2. Skylights shall meet the requirements as listed in subsection (C) of this section.
- F. Floors. There are not special requirements for limitation of sound transmission through floors in this section. See SMC 13.240.090 for requirements under bedrooms.

### G. Ventilation.

1. Interior Building Ventilation. A mechanical ventilation system shall be installed that will provide the minimum air circulation and fresh air supply requirements for the various uses in the occupied rooms without the need to open any windows, doors, or other openings to the exterior. The inlet and discharge openings shall be fitted with sheet metal ducts of at least twenty-six (26) gauge steel, which shall be

insulated with R-11 sound-absorbing insulation, and shall be at least five (5) feet long with one (1) ninety (90) degree bend.

When homes with forced air heating systems use an "integrated ventilation system" designed in accordance with 302 and/or 303 of the Washington State Ventilation and Indoor Air Quality Code, they shall be considered to meet the above code requirements with the following additions. (See Figures 13.240.100c and 13.240.100d.)

- a. The inlet duct shall be sized to allow for it to be insulated with R-11 thick sound-absorbing insulation.
- b. This duct shall be not less than five (5) feet long with at least one (1) ninety (90) degree bend.

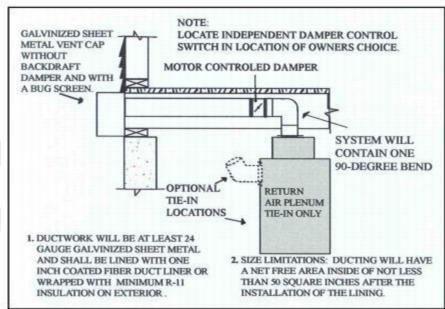


Figure 13.240.100c. VENTILATION TIE-IN

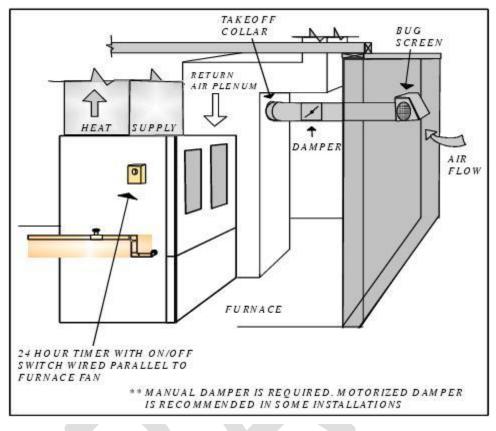
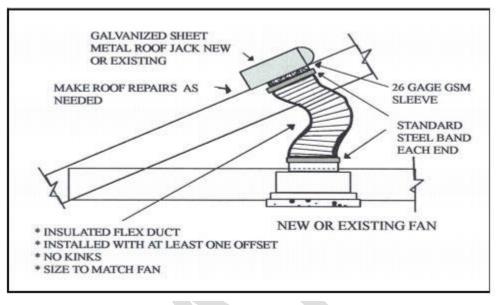


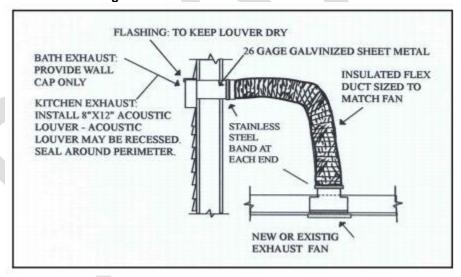
Figure 13.240.100d. VENTILATION DAMPER

- 2. Gravity vent openings in attics and crawlspaces shall be as close to code minimum in number and size as is practical.
- 3. All ducts serving bathrooms, laundries, kitchens and similar rooms shall meet a twenty-five (25) dB noise reduction level. The following criteria will be considered as meeting a twenty-five (25) dB noise reduction level:
  - a. They shall contain at least a five (5) foot length of external sound-absorbing duct insulation, when allowed by the SeaTac Mechanical Code. When allowed, duct may be glass fiber duct insulation of at least R-11 thickness for its entire length. (See Figures 13.240.100e and 13.240.100f.)
  - b. Each duct shall be provided with a bend in the duct such that there is no direct line-of-sight through the duct from the vent exterior opening to the room opening.
- 4. Fireplaces shall be provided with well-fitted dampers.



Figures 13.240.100e. BATH OR KITCHEN FAN

Figure 13.240.100f. BATH OR KITCHEN FAN



(Ord. 04-1008 § 3)

# 13.240.110 Building requirements for a noise level reduction of thirty (30) dB.

A. Compliance. Compliance with this section shall be deemed to meet requirements for a minimum noise level reduction (NLR) of thirty (30) decibels.

#### B. Exterior Walls.

1. Exterior walls shall have a laboratory sound transmission class rating of at least STC-35.

Exception: Insulated walls that are constructed in accordance with the SeaTac Energy Code and that have interior and exterior sheathing of not less than five-eighths (5/8) inch thick, or walls built in accordance with the following, shall be considered to meet the STC-35 requirements:

a. Masonry and concrete walls having a weight of at least forty (40) pounds per square foot. These walls are not required to be furred out on the interior of the wall if at least one (1) surface of the concrete block wall is plastered.

b. Stud walls at least four (4) inches in nominal depth shall be considered to meet the above requirements if built as defined below and to ASTM E497, Standard Practice for Installing Sound-Isolating Lightweight Partitions.

i. The interior surface of the exterior walls shall be covered with gypsum board or plaster at least one-half (1/2) inch thick. If the exterior of the wall is stucco or brick veneer, the interior gypsum board or plaster may be fastened rigidly to the studs. If the exterior is of any other siding, the interior gypsum board or plaster shall be fastened resiliently to the studs.

ii. Insulation material at least R-11 shall be installed continuously throughout the cavity space, installed as specified in the Washington State Energy Code. (See Figure 13.240.100a.)

iii. The outside of the wall shall be covered with a continuous layer of composition board, plywood, gypsum board, or a combination of these materials that is not less than three-quarters (3/4) inch thick.

iv. Outside sheathing panels shall be covered with a layer of building paper, or equivalent, installed accordance with the SeaTac Building and Residential Codes.

v. Siding shall be installed over the building paper.

### C. Exterior Windows.

1. Windows other than as described in this section shall have a laboratory sound transmission class rating of at least STC-33.

Exception: Windows meeting the criteria listed below shall be considered to meet the STC-33 requirement:

- a. A window that is double-glazed with the glass at least one-eighth (1/8) inch thick with not less than a one-half (1/2) inch air space between the glass panels.
- 2. All windows shall be installed to meet the following requirements:
  - a. The glass shall be sealed into the frame in an airtight manner with a nonhardening sealant or a soft elastomer gasket, or gasket tape.
  - b. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.
  - c. The perimeter of the window frames shall be sealed to the exterior wall construction in accordance with the SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

#### D. Exterior Doors.

1. Doors other than as described in this section shall have a laboratory sound transmission class rating of at least STC-33.

Exception: Doors meeting the following criteria shall be considered as meeting the STC-33 rating:

- a. Double door construction, where a minimum space between the double doors shall be not less than three (3) inches, is required.
- b. At side-hinged doors, at least one (1) of the doors shall be a solid-core wood, or insulated hollow metal, that is not less than one and three-quarters (1 3/4) inch thick at its thinnest point. The second door may be a storm door. Both doors shall meet all requirements of this section.
- c. Glass installed in a solid-core wood door, that has a total area of more than two (2) square feet, shall be not less than three-sixteenths (3/16) inch thick.

- d. All glass and glazing shall be sealed in an airtight manner with a nonhardening sealant or in a soft elastomer gasket or glazing tape.
- e. Exterior sliding glass doors shall be weather-stripped with an efficient airtight gasket system.
- f. The double sliding glass doors shall be double-glazed with a separation between glass panels of not less than one-half (1/2) inch. The glass used in the double-glazed glass panels shall be of unequal thickness.
- 2. All doors shall be installed to meet the following requirements:
  - a. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.
  - b. The perimeter of the doorframes shall be sealed to the exterior wall construction in accordance with the SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

### E. Roof/Ceiling.

1. Combined roof and ceiling construction other than described in this section shall have a laboratory sound transmission class rating of at least STC-44.

Exception: Roof-ceiling assemblies that are constructed in accordance with the SeaTac Energy Code, and the following criteria, shall be considered to meet the STC-44 requirement:

- a. The roof deck shall be sheathed with not less than three-quarters (3/4) inch composition board, plywood or gypsum board sheathing, topped by roofing.
- b. Ceiling insulation shall be not less than R-19, and not less than the minimum requirement of the SeaTac Energy Code. The insulation shall be installed with not less than six (6) inches average air space between the insulation and the roof deck.
- c. Gypsum board or plaster ceilings shall be not less than five-eighths (5/8) inch thick.
- d. The ceiling shall be substantially airtight with a minimum of penetrations. Lighting fixtures penetrating the ceiling assembly shall be in accordance with the requirements in the SeaTac

Energy Code. (See Figure 13.240.100b.) Other types of penetrations shall be treated in a similar manner to the requirements in the SeaTac Energy Code.

#### F. Floors.

- 1. The floor of the lowest occupied rooms shall be slab on fill, below grade, over a fully enclosed basement, or over a crawlspace. All window and door openings in a fully enclosed basement shall be tightly fitted and sealed in accordance with this section. All ventilation openings into the crawlspace shall be constructed in accordance with the provisions elsewhere in this section.
- 2. Floors over fully enclosed garages and over carports shall have laboratory sound transmission class rating of at least STC-35.

Exception: Fully enclosed garages, where the roof/ceiling, walls, windows, and doors are completed in accordance with the provisions of SMC 13.240.100. The overhead garage door will not be required to meet the provisions in section (D) of this section for doors, if it is an insulated garage door.

Floors over fully enclosed garages and over carports, when constructed as defined below, will be considered to meet minimum requirements.

- a. The floor over the garage shall be insulated to not less than an R-19, but not less than that specified in the SeaTac Energy Code.
- b. The floor/ceiling assembly shall be sealed in accordance with the SeaTac Energy Code.

#### G. Ventilation.

1. Interior Building Ventilation. A mechanical ventilation system shall be installed that will provide the minimum air circulation and fresh air supply requirements for the various uses in the occupied rooms without the need to open any windows, doors, or other openings to the exterior. The inlet and discharge openings shall be fitted with sheet metal ducts of at least twenty-six (26) gauge steel, which shall be insulated with R-11 sound-absorbing insulation, and shall be at least five (5) feet long with one (1) ninety (90) degree bend.

When homes with forced air heating systems use an "integrated ventilation system" designed in accordance with Section 302 and/or 303 of the SeaTac Ventilation and Indoor Air Quality Code, they shall be considered to meet the above code requirements with the following additions. (See Figures 13.240.100c and 13.240.100d.)

- a. The inlet duct shall be sized to allow for it to be insulated with R-11 sound-absorbing insulation.
- b. This duct shall be not less than five (5) feet long with at least one (1) ninety (90) degree bend.
- 2. Gravity vent openings in attics and crawlspaces shall be as close to code minimum in number and size as practical. The openings shall be fitted with transfer ducts at least three (3) feet in length insulated with R-11 sound-absorbing duct insulation. Each duct shall have a ninety (90) degree bend in the duct such that there is no direct line-of-sight from the exterior through the duct into the attic or crawlspace. The interior cross-sectional area shall not be reduced to less than the opening size that the duct is attached to. (See Figures 13.240.110a, 13.240.110b, 13.240.110c, and 13.240.110d.)
- -3. All ducts serving bathrooms, laundries, kitchens and similar rooms shall meet a thirty (30) dB noise reduction level. The following criteria will be considered as meeting a thirty (30) dB noise reduction level. (See Figures 13.240.100e and 13.240.100f.)
  - a. They shall contain at least a ten (10) foot length of external sound-absorbing duct insulation, when allowed by the SeaTac Mechanical Code. When allowed, duct insulation may be glass fiber duct insulation of at least R-11 inch thickness for its entire length.
  - b. Each duct shall be provided with a ninety (90) degree bend in the duct such that there is no direct line-of-sight through the duct from the vent exterior opening to the room opening.
  - c. Domestic range exhaust ducts connecting the interior space to the outdoors shall contain a selfclosing baffle plate across the exterior termination which allows proper ventilation. The duct shall be provided with a ninety (90) degree bend.
- 4. Fireplaces shall be provided with well-fitted dampers.

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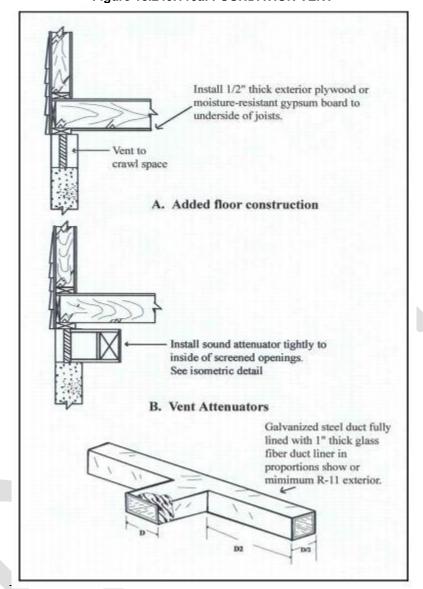


Figure 13.240.110a. FOUNDATION VENT

Figure 13.240.110b. RIDGE VENT

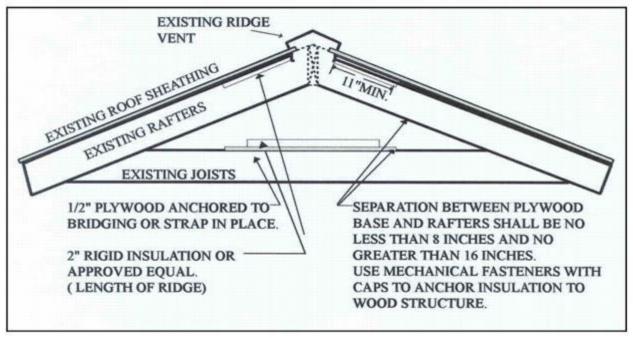
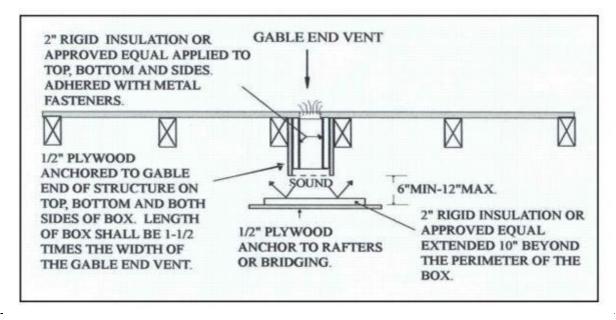


Figure 13.240.110c. GABLE END VENT



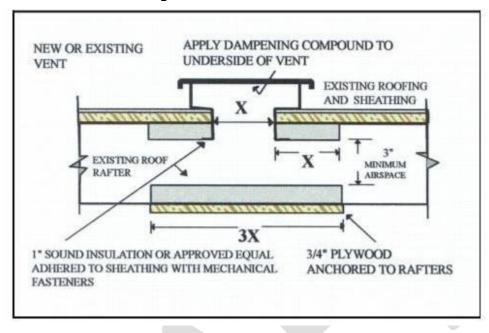


Figure 13.240.110d. ROOF VENT

(Ord. 04-1008 § 3)

## 13.240.120 Building requirements for a noise level reduction of thirty-five (35) dB.



A. Compliance. Compliance with this section shall be deemed to meet requirements for a minimum noise level reduction (NLR) of thirty-five (35) decibels.

## B. Exterior Walls.

1. Exterior walls shall have a laboratory sound transmission class rating of at least STC-40.

Exception: The following wall descriptions shall be considered to meet an STC-40 requirement.

- a. Masonry and concrete walls having a weight of at least seventy-five (75) pounds per square foot. These walls are not required to be furred out on the interior of the wall if at least one (1) surface of the concrete block wall is plastered.
- b. Stud walls at least four (4) inches in nominal depth shall be considered to meet the above requirements if built as defined below and to ASTM E497, Standard Practice for Installing Sound-Isolating Lightweight Partitions.

i. The interior surface of the exterior walls shall be covered with gypsum board or plaster at least five-eighths (5/8) inch thick. If the exterior of the wall is stucco or brick veneer, the interior gypsum board or plaster may be fastened rigidly to the studs. If the exterior is of any other siding, the interior gypsum board or plaster shall be fastened resiliently to the studs.

ii. Insulation of at least R-19, or an R-19 equivalent, shall be installed continuously within, or upon, the building envelope. The installation shall be as specified in the SeaTac Energy Code. (See Figure 13.240.100a.)

iii. The outside of the wall shall be covered with a continuous layer of composition board, plywood, gypsum board, or a combination of these materials that is not less than one (1) inch thick.

iv. Outside sheathing panels shall be covered with a layer of building paper, or equivalent, installed in accordance with the SeaTac building codes.

v. Siding shall be installed over the building paper.

#### C. Exterior Windows.

1. Windows shall have a laboratory sound transmission class rating of at least STC-36.

Exception: Windows meeting the criteria listed below shall be considered to meet the STC-36 requirement.

- a. A window that is double-glazed with the glass at least three-sixteenths (3/16) inch thick with not less than a one-half (1/2) inch air space between the glass panels.
- b. The glass panels shall be of unequal thickness.
- 2. All windows shall be installed to meet the following requirements:
  - a. The glass shall be sealed into the frame in an airtight manner with a nonhardening sealant or a soft elastomer gasket or gasket tape.
  - b. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.

c. The perimeter of the window frames shall be sealed to the exterior wall construction in accordance with the SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

#### D. Exterior Doors.

1. Doors other than as described in this section shall have a laboratory sound transmission class rating of at least STC-33.

Exception: Doors meeting the following criteria shall be considered as meeting the STC-33 rating:

- a. Double door construction, with a three (3) foot vestibule or enclosed porch between the doors, is required.
- b. The doors shall be side-hinged solid-core wood, or insulated hollow metal doors, that are not less than one and three-quarters (1 3/4) inches thick at its thinnest point. Both doors shall meet all other requirements of this section.
- c. Glass installed in the door that has a total area of more than two (2) square feet shall be not less than three-sixteenths (3/16) inches thick.
- d. Exterior sliding glass doors shall be weather-stripped with an efficient airtight gasket system.
- e. The double sliding glass doors shall be double-glazed with a separation between glass panels of not less than one-half (1/2) inch. The glass used in the double-glazed glass panels shall be of unequal thickness.
- 2. All doors shall meet the following requirements:
  - a. All glass and glazing shall be sealed in an airtight manner with a nonhardening sealant or in a soft elastomer gasket or glazing tape.
  - b. They shall be weather-stripped to conform to an air infiltration test not to exceed one-half (1/2) cubic foot per minute per foot of crack length, in accordance with ASTM E-283-65-T.
  - c. The perimeter of the doorframes shall be sealed to the exterior wall construction in accordance with the SeaTac Energy Code. The sealant used shall meet one (1) of the specifications listed in SMC 13.240.080.

#### E. Roofs/Ceilings.

1. Combined roof and ceiling construction shall have a laboratory sound transmission class rating of at least STC-49.

Exception: Roof-ceiling assemblies that are constructed in accordance with the SeaTac Energy Code shall be considered to meet the STC-49 requirement if they meet the following additional criteria:

- a. The roof deck shall be sheathed with not less than one (1) inch composition board, plywood or gypsum board sheathing, topped by roofing.
- b. Ceiling insulation shall be not less than R-30, and not less than the minimum requirement of the SeaTac Energy Code. The insulation shall be installed with not less than six (6) inches average air space between the insulation and the roof deck.
- c. Gypsum board or plaster ceilings shall be not less than five-eighths (5/8) inch thick mounted to the structural members on resilient clips or channels.
- d. The ceiling shall be substantially airtight with a minimum of penetrations. Lighting fixtures penetrating the ceiling assembly shall be in accordance with the requirements in the SeaTac Energy Code. (See Figure 13.240.100b.) Other penetrations shall be treated in a similar manner to the requirements in the Washington State Energy Code.
- 2. Open beam roof construction using clay or concrete tiles shall be considered as meeting an STC-49 requirement when one (1) inch plywood decking is used and the insulation levels meet the SeaTac Energy Code requirements.

# F. Floors.

- 1. The floor of the lowest occupied rooms shall be slab on grade or below grade. Crawlspaces are prohibited.
- 2. Floors over fully enclosed garages and over carports shall have laboratory sound transmission class rating of at least STC-40.

Exception: Fully enclosed garages, where walls, windows, and doors are completed in accordance with the provisions of SMC 13.240.110. The overhead garage door will not be required to meet the provisions in subsection (D) of this section for doors, if it is an insulated garage door.

- 3. Fully enclosed garages, when constructed as defined below, will be considered to meet minimum requirements.
  - a. The floor over the garage shall be insulated to not less than an R-19, but not less than that specified in the SeaTac Energy Code.
  - b. The floor/ceiling assembly shall be sealed in accordance with the SeaTac Energy Code.
  - c. Two (2) layers of five-eighths (5/8) inch, one and one-quarter (1 1/4) inch minimum thickness gypsum wallboard shall be installed on the garage side of the floor-ceiling assembly.
  - d. All window and door openings in the garage shall be tightly fitted and sealed in accordance with this section.
- 4. Carports, when constructed as defined below, will be considered to meet minimum requirements:
  - a. Carports where the ceiling is insulated to not less than an R-19, but not less than that specified in the SeaTac Energy Code.
  - b. The floor/ceiling assembly shall be sealed in accordance with the SeaTac Energy Code.
  - c. Two (2) layers of five-eighths (5/8) inch, one and one-quarter (1 1/4) inch minimum thickness gypsum wallboard shall be installed on the carport side of the floor-ceiling assembly.

## G. Ventilation.

1. Interior Building Ventilation. A mechanical ventilation system shall be installed that will provide the minimum air circulation and fresh air supply requirements for the various uses in the occupied rooms without the need to open any windows, doors, or other openings to the exterior. The inlet and discharge openings shall be fitted with sheet metal ducts of at least twenty-six (26) gauge steel, which shall be insulated with R-11 sound-absorbing insulation, and shall be at least ten (10) feet long with one (1) ninety (90) degree bend.

When homes with forced air heating systems use an "integrated ventilation system" designed in accordance with Section 302 and/or 303 of the SeaTac Ventilation and Indoor Air Quality Code, they shall be considered to meet the above code requirements with the following additions:

- a. The inlet duct shall be sized to allow for it to be insulated with R-11 sound-absorbing insulation.
- b. This duct shall be not less than ten (10) feet long with at least one (1) ninety (90) degree bend. (See Figures 13.240.100c and 13.240.100d.)
- 2. Gravity vent openings in attics shall be as close to code minimum in number and size as practical. The openings shall be fitted with ducts at least six (6) feet in length insulated with R-11 sound-absorbing insulation. Each duct shall have a ninety (90) degree bend in the duct such that there is no direct line-of-sight from the exterior through the duct into the attic. The interior cross-sectional area shall not be reduced to less than the opening size that the duct is attached to.
- 3. All ducts serving bathrooms, laundries, kitchens and similar rooms having a direct, unimpeded connection with a bedroom shall meet a thirty-five (35) dB noise reduction level. The following criteria will be considered as meeting a thirty-five (35) dB noise reduction level. (See Figures 13.240.100e and 13.240.100f.)
- 4. They shall contain at least a ten (10) foot length of external R-11 sound-absorbing duct insulation, when allowed by the SeaTac Mechanical Code. When allowed, duct insulation may be glass fiber insulation of at least R-11 thickness for its entire length.
  - a. Each duct shall be provided with a ninety (90) degree bend in the duct such that there is no direct line-of-sight through the duct from the vent exterior opening to the room opening
  - b. Domestic range exhaust ducts connecting the interior space to the outdoors shall contain a selfclosing baffle plate across the exterior termination, which allows proper ventilation. The duct shall be provided with a ninety (90) degree bend. (Ord. 04-1008 § 3)