
Chapter 16.03
AMENDMENTS TO THE INTERNATIONAL FIRE CODE¹

Sections:

- [16.03.010](#) Amendments to International Fire Code (hereinafter referred to as the “IFC”) Chapter 1, Administration.
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- [16.03.050](#) Amendments to IFC Chapter 10, Means of Egress.
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- [16.03.080](#) Amendments to IFC Appendix D, Fire Apparatus Access Roads.

16.03.010 Amendments to International Fire Code (hereinafter referred to as the “IFC”) Chapter 1, Administration.

- A. Chapter 1 of the IFC is hereby amended by the addition of the following language:

Enforcement authority—Identification—Obstruction—Conflict.

1. It shall be the responsibility of the Fire Code Official under the direction of the Everett fire chief to enforce all provisions of the International Fire Code.
2. The fire chief or his/her designee(s) shall be empowered to exercise the authority of peace officers to the extent necessary to enforce the city fire code, which power shall include issuance of citations.
3. Persons designated by the fire chief to enforce the fire code shall bear identification reflecting the authority under which they act, which identification shall be shown to any person requesting the same. The fire chief is authorized to designate the fire marshal, assistant fire marshals and fire inspectors to enforce the fire code.
4. A person commits the offense of obstructing a fire inspector, fire marshal or assistant fire marshal if:
 - a. He or she intentionally uses or threatens to use force to obstruct a person he or she knows or should reasonably know is a fire inspector, fire marshal or assistant fire marshal and while such fire inspector, fire marshal or assistant fire marshal is performing his or her official duties; or
 - b. He or she intentionally does any act that he or she knows or should reasonably know will interfere with or obstruct a person known to be or who should reasonably be known to be a fire inspector, fire marshal or assistant fire marshal and while such fire inspector, fire marshal or assistant fire marshal is performing his or her official duties.

5. Any person requested to identify himself or herself to a fire inspector, fire marshal or assistant fire marshal pursuant to an investigation of a fire code violation has a duty to identify himself or herself and give his or her current address.

6. To the extent allowed by RCW 19.27.040, if provisions within the Everett fire code conflict, the fire code official has discretion to choose which provisions shall apply.

B. Subsection 102.3 of the IFC, entitled "Change of use or occupancy," is hereby deleted and the following inserted in its place:

102.3 Change of use or occupancy. The provisions of the International Building Code and the International Fire Code shall apply to all buildings undergoing a change of occupancy.

C. Section 103 of the IFC is hereby deleted in its entirety.

D. Section 104 of the IFC, entitled "General Authority and Responsibilities," is hereby amended by the addition of the following new subsection 104.1.1:

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. These conditions may include, by way of example and without limitation, increased setbacks, use of fire retardant materials, installation of standpipes, fire sprinkler and fire alarm systems.

E. The following language is hereby deleted from Section 104.10 of the IFC:

Information that could be related to trade secrets or processes shall not be made part of the public record except as directed by a court of law.

F. Section 108 of the IFC is hereby deleted in its entirety.

G. Section 109 of the IFC, entitled "Violations," is hereby deleted and the following inserted in its place:

Section 109 VIOLATIONS

109.1 Authority to abate.

See Section [16.005.030](#).

109.2 Fire Code Official order.

1. The Fire Code Official hereby has the authority to order dangerous structures, buildings, places, conditions, or materials to be removed, corrected, vacated or demolished in such manner as shall be set forth in an order, which shall be in substantially the following form:

FIRE CODE OFFICIAL ORDER

City of Everett

To: (Name of party to whom order is issued and description of premises or places by street address.)

You, and each of you, are hereby notified by the undersigned Fire Code Official that an inspection of the premises or place above-described was made on the _____ day of _____, 20__ at which time there was found upon said above-described premises or place conditions particularly dangerous to the safety of persons and property and especially liable to fire or spread of fire. That said conditions found were as follows:

(List findings—factually describing the conditions.)

NOW, THEREFORE, YOU ARE HEREBY ORDERED TO

(Describe the manner in which the conditions are to be remedied and time allowed to correct conditions.)

YOU ARE FURTHER HEREBY NOTIFIED that this order is made pursuant to the International Fire Code as adopted by the City of Everett, which is on file with the Clerk of the City of Everett, 2930 Wetmore Avenue, Everett, Washington 98201, and open for your inspection.

YOU ARE FURTHER NOTIFIED that you may appeal this order and seek review thereof with the City of Everett Violations Hearing Examiner provided you file such appeal within thirty (30) calendar days of service of this order. The filing of an appeal does not stay compliance with this Order within the time (s) prescribed herein.

DATED at Everett, Washington, this _____ day of _____, 20__.

Fire Code Official, City of Everett

2. The service of Fire Code Official Orders for the correction of violations of the Fire Code or the correction of dangerous or hazardous conditions, as herein defined, shall be made upon all occupants and persons having any interest in such property as shown upon the records of the Snohomish County Auditor, by delivering a copy of such order to such named individual, or by leaving it with a person of suitable age and discretion at the usual place of abode of such person being served.

In the event that such person cannot be served personally in the City of Everett, then such Fire Code Official Order may be served by delivering to and leaving with any person in charge of the premises a copy of such order, and by mailing a copy of such order in an envelope with postage prepaid, addressed to the last known post office address of such individual.

In the event that no person can be found in charge of the premises, then such order may be served upon any of the persons or parties herein set forth by affixing or posting a copy of such order to the premises and by mailing a copy of such order to such named individual in an envelope addressed to such person, with postage prepaid thereon, to such individual's last known post office address.

3. If the buildings or other premises are owned by one person and occupied by another under a lease or leasehold agreement or otherwise, the orders issued in connection herewith shall apply to the occupant or tenant thereof, provided that if the person on whom the order is served is a tenant or occupying such premises under a lease or leasehold agreement or otherwise, then such individual shall be deemed to have complied with the Fire Code Official Order if the said tenant or lessee immediately causes said premises to be made safe by taking such steps as acceptable to the Fire Code Official to correct the violation(s) as specified in the Fire Code Official Order or closes, vacates and secures such premises.

4. Any such Fire Code Official Order shall be forthwith complied with as set forth in said order within the time or times therein prescribed. Any person upon whom such order is served, may take an appeal of such order and seek review thereof with the Hearing Examiner, provided such appeal is filed within thirty (30) calendar days after service of such order. The filing of an appeal does not stay compliance with the Fire Code Official Order within the time(s) prescribed in said order.

5. In the event that any such person seeking a review before the Hearing Examiner fails to comply with all of the steps herein set forth, then the Hearing Examiner may dismiss such appeal and if all of the steps for appeal have not been complied with, the appeal of such party shall be dismissed by the Hearing Examiner. All decisions of the Hearing Examiner shall be final.

109.3 Violation citation—Order.

See Section [16.005.030](#).

109.4 Violations and Penalties.

See Section [16.005.030](#).

(Ord. 3196-10 Part 4 § 1, 2010)

16.03.020 Amendments to IFC Chapter 3, General Precautions Against Fire.

A. Section 307 of the IFC, entitled "Open Burning and Recreational Fires," is hereby deleted and the following inserted in its place:

Section 307

OPEN BURNING AND RECREATIONAL FIRES

307.1 General. It shall be unlawful and a public nuisance for any person to kindle or maintain or authorize to be kindled or maintained any open burning within this city unless conducted and approved in accordance with this section.

307.1.1 Prohibited open burning. Open burning that is offensive or objectionable because of smoke or odor emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

307.2. Exemptions.

307.2.1 Recreational fires. Recreational fires are allowed without permit under the following circumstances:

1. Recreational fires shall not be conducted within 25 feet of a structure or combustible material unless in an approved appliance with a clearly visible manufacturer's listing and installed per manufacturer's listing. Conditions which could cause a fire to spread within 25 feet of a structure shall be eliminated prior to ignition.
2. Fires shall be limited to three feet in diameter and two feet in height.
3. Only dry, seasoned wood may be burned. Construction scraps, green wood, shrub trimmings, leaves, and other refuse are prohibited for use as fuel.
4. If a recreational fire is on a salt water beach, it shall not be located in areas where substantial driftwood accumulations exist.
5. Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet of a structure or combustible material.

Exception: Portable outdoor fireplaces used at one- and two-family dwellings.

307.2.2 Bonfires.

Notwithstanding the language in 307.2.1, bonfires do require a permit and shall not be conducted within 50 feet of a structure or combustible material unless the fire is contained in a barbecue pit. Conditions which could cause a fire to spread within 50 feet of a structure shall be eliminated prior to ignition. Only dry, seasoned wood may be burned. Construction scraps, green wood, shrub trimmings, leaves, and other refuse are prohibited for use as fuel. If a bonfire is on a salt water beach, it shall not be located in areas where substantial driftwood accumulations exist.

307.2.3 Fire hazard prevention. At the discretion of the Fire Code Official, fires for the prevention of a fire hazard are allowed under permit from the Everett Fire Department, provided no alternate means of prevention is reasonably available.

307.2.4 Instruction and testing. Fires for instruction of public officials in methods of firefighting, testing fire resistance of materials, or testing fire protection equipment are allowed, provided prior written approval has been issued by the control officer of the Puget Sound Clean Air Agency and the Everett Fire Code Official or his designee.

307.3 Extinguishment Authority. In addition to any powers vested in the control officer of the Puget Sound Clean Air Agency, the Fire Code Official or his designee is authorized to order the extinguishment by the person who kindled and/or is maintaining the fire, the permit holder, or the fire department, of open burning which creates or adds to a hazardous or objectionable situation, where a violation of this chapter is found, or because of any false statement or misrepresentation as to a material fact in the information or plans submitted on which the right to burn was based.

307.4 Location. The location for allowed open burning shall not be less than 51 feet from any structure, and provisions shall be made to prevent the fire from spreading to within 50 feet of any structure. If any provision of this section requires a smaller distance from a structure, that provision shall be complied with.

307.5 Attendance. All allowed open burning shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with the Everett Fire Code with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate use. A fire shall not be considered extinguished unless one can handle the ashes without protection.

B. Subsection 311.5 of the IFC, entitled "Placards," is hereby amended by the addition of the following new subsection 311.5.6:

311.5.6 Unlawful to remove or deface. It shall be unlawful for any person to remove or deface any placard applied pursuant to this section until the required repairs, demolition or removal have been completed and a certificate of occupancy issued pursuant to the provisions of the Everett Building Code.

(Ord. 3196-10 Part 4 § 2, 2010)

16.03.030 Amendments to IFC Chapter 5, Fire Service Features.

A. Section 503 of the IFC, entitled "Fire Apparatus Access Roads," is hereby amended by the addition of the following subsection 503.1:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet

of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The Fire Code Official is authorized to increase the dimension of 150 feet where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

503.1.2 Additional access. The Fire Code Official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to building used for high-piled combustible storage shall comply with the applicable provisions of Chapter 23.

- B. Section 503.2 of the IFC is hereby adopted and Subsection 503.2.1 of the IFC, entitled "Dimensions," is hereby deleted and the following inserted in its place:

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 (6,096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6 and Appendix D 103.5, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4,115 mm).

- C. Subsection 503.2.6 of the IFC, entitled "Bridges, vaults, and elevated surfaces," is hereby deleted and the following inserted in its place:

503.2.6 Bridges, vaults, and elevated surfaces. Where a bridge, utility vault, or an elevated surface is part of a fire apparatus access road, the bridge, utility vault, or elevated surface shall be constructed and maintained in accordance with specifications established by the fire code official and the City Engineer, 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, vaults, and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of a 30 ton or greater 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 that use, approved barriers or approved signs, or both, shall be installed and maintained, if required by the fire code official.

D. Subsection 503.3 of the IFC, entitled "Marking," is hereby deleted and the following inserted in its place:

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" as defined in section 502.1 of the code, 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:

1. Curbs shall be identified by red traffic paint with a 6 inch wide stripe on the top and front, extending the length of the designated fire lane.
2. Rolled curbs shall be identified by red traffic paint with a 6 inch wide stripe on the curb, extending the length of the designated fire lane.
3. 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. In most cases, both sides of the access road shall be marked. Where long drives are to be marked, the repetitions shall alternate sides of the drive.
5. Marking shall also include the addition of metal signs stating "NO PARKING—FIRE LANE—TOW AWAY ZONE" to be installed at intervals or locations designated by the fire code official. The signs shall be approximately 12 inches in width and 18 inches in height and have red letters on a white background. Metal signs shall be installed on either 2 inch metal pipes, for private property, or treated 4 inch by 4 inch wood posts, for public property, and shall be located so that the bottom of the sign is a minimum of 7 feet above the curb. 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.
6. Where directed by the fire code official, specific areas shall be designated and those areas are to 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.

503.3.1 Alternate materials and methods. The Fire Code Official may modify, on a case-by-case basis, any of the marking provisions in this subsection 503.3 where practical difficulties exist. Modification requests shall be submitted in writing to the fire code official setting forth a suggested alternative.

E. Section 503 of the IFC, entitled "Fire Apparatus Access Roads," is hereby amended by the addition of the following new subsection 503.4:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

F. Subsection 505.1 of the IFC, entitled "Address Identification," is hereby deleted and the following inserted in its place:

505.1 Address Identification. Post and maintain the correct street address number in a conspicuous place over or near the principal street entrance, or in such other conspicuous place as is necessary for the easy locating of such an address. Numbers shall be easily recognizable figures contrasting with the color of the building or other structures upon which they are placed. Therefore:

1. Address numbers or letters on the front of buildings shall be a minimum of six inches (6") high for commercial buildings and four inches (4") high for single-family occupancies. Address numbers or letters shall contrast with their background. The principal stroke of the address numbers shall be at least three-quarters inch (3/4") for figures 6 inches (6") high and larger.

2. When the address numbers are located on clear glazing such as doors, windows, or lights, the numbers shall be white or black to achieve contrast during all lighting conditions.

3. When the building is more than fifty feet (50') from the road or fire lane, the height of each address number shall be increased as specified in Table 3-1 to a maximum of twelve inches (12").

4. Where the building is not visible from the street or a single access road or private roadway serves more than one building, provision shall be made to clearly identify which driveway or roadway serves the appropriate address.

5. Address numbers at least four inches (4") shall be prominently displayed on rear entrance or access doors when required by the Fire Chief or his/her designee.

6. Interior and exterior access doors or individual dwelling, housekeeping, living units, or commercial tenant spaces also shall be clearly marked. Numbers and/or letters of such units shall be at least four inches (4") high.

Table 3-1
—Address Numbering Figure Size Table

DISTANCE FROM ROAD OR FIRE LANE	MINIMUM SIZE
0—50 feet	4" H x 1.5" W
51—100 feet	6" H x 3" W
101—150 feet	8" H x 4" W
151—200 feet	10" H x 5" W
201 feet and up	12" H x 6" W

Four-inch (4") figures are permitted for single-family occupancies only. The minimum size figure for commercial occupancies is six inches (6"). The height to width ratio of the figures shall be approximately 2H:1W.

G. Section 507 of the IFC, entitled "Fire Protection Water Supplies," is hereby amended by the addition of the following new Subsection 507.1.1:

507.1.1 Existing non-conforming hydrants. At such time as an existing private hydrant, which does not conform to the requirements and standards of this section, is replaced, it shall be replaced with a hydrant that does conform to the standards and requirements of this section.

H. Subsection 507.2 of the IFC, entitled "Type of water supply," is hereby deleted and the following inserted in its place:

507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with applicable city standards or, in the absence thereof, NFPA 24.

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance with applicable city standards or, in the absence thereof, NFPA 22.

I. Subsection 507.3 of the IFC, entitled "Fire flow," is hereby deleted and the following inserted in its place:

507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined in accordance with Appendix B.

J. Subsection 507.4 of the IFC, entitled "Water supply test," is hereby deleted and the

following inserted in its place:

507.4 Water supply test. The Fire Code Official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the Fire Code Official or approved documentation of the test shall be provided to the Fire Code Official prior to final approval of the water supply system. Unless otherwise provided by city law, rule or other regulation, the city public works department conducts water supply tests.

K. Subsection 507.5 of the IFC, entitled "Fire hydrant systems," is hereby deleted and the following inserted in its place:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with EMC [14.16.570](#). The reference to single family dwellings in EMC 14.16.570.C also applies to duplexes. At the discretion of the Fire Code Official or his designee, an approved NFPA 13D sprinkler system may be substituted for the provisions of EMC 14.16.570.C to a maximum driving distance of 600 feet to the nearest hydrant with approved fire flow available if said substitution presents no threat to human life, health or safety. An NFPA 13D sprinkler system substituted for the hydrant distance requirement may not be used as a concurrent equivalence for any other City code requirement for the same structure, project, short-plat, subdivision or development.

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 200 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Code Official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 350 feet.

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the Fire Code Official. 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.

507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 at the following intervals:

1. Private fire hydrants (all types): Inspection annually and after each operation; flow test and maintenance annually.

2. Fire service main piping: Inspection of exposed, annually; flow test every five years.

3. Fire service main piping strainers: Inspection and maintenance after each use.

507.5.4 Obstruction. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

507.5.5 Clear space around hydrants. A three-foot clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved.

507.5.6 Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with Section 312.

L. Section 507 of the IFC, entitled "Fire Protection Water Supplies," is hereby amended by the addition of the following new Subsection 507.6:

507.6 Notification. The owner of property on which private hydrants are located must provide the fire code official with the following written service notifications:

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

507.6.2 Out-of-service notification. 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.

M. Subsection 509.1 of the IFC, entitled "Identification," is hereby deleted and the following inserted in its place:

509.1 Identification. The following identification requirements shall apply to access to equipment.

1. Fire protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent parking and/or other obstructions.
2. Entrances to rooms containing controls for sprinkler risers and valves, or other fire detection, suppression, or control elements shall be identified for the use of the fire department.
3. Approved signs are required to identify fire protection equipment and equipment location.
4. All fire department connections shall have a sign approved by the fire code

official. The sign shall specify the type of water-based fire protection system it serves and the building areas served.

5. All main control valves and sectional valves for water-based fire protection systems shall have a sign specifying what the valves control.

6. All sprinklers and standpipe risers shall have signs to indicate which type of water-based fire protection system is being used.

N. Chapter 5 of the IFC, entitled "Fire Service Features," is hereby amended by the addition of the following Section 510:

SECTION 510

EMERGENCY RADIO SYSTEMS

510.1 General. The Snohomish County Emergency Radio System (SERS) wireless communications networks are essential to the health, safety, and welfare of the citizens of Everett by providing communications for law enforcement activities, for emergency medical treatment, for fire suppression, for carrying on the business of government, and for providing communications in time of disasters. It is the intent of this section to ensure the uninterrupted operation of City of Everett public safety, other emergency-related and county operational or planned wireless communications networks inside new and existing structures in the City of Everett.

510.2 Definitions.

"ADEQUATE RADIO COVERAGE" is as specified in Section 510.4 below.

"BUILDING OWNER" means the person responsible for making final decisions relating to additions or modifications to the building. "Building owner" may include a building owner's property manager or agent.

"PERSON" includes individuals, corporations, limited liability companies, associations and other forms of business organization.

"SUBSTANTIALLY ALTER" means to modify a structure when such modifications could degrade SERS performance, either in the structure, or in the context of the current or planned SERS microwave paths.

"CELLULAR TELEPHONE JAMMER" means transmitters that are specifically intended to disrupt the reception of cellular telephone signals in the frequency range of 800 MHz to 900 MHz. Such devices may interfere with the proper operation of public safety radio systems operating at 800 MHz.

510.3. Applicability.

510.3.1 No person shall erect, construct, change the use of, or substantially alter, any building or structure or any part thereof, or cause the same to be

done which fails to support adequate radio coverage for (SERS). Underground structures, whether separate or adjoining other structures, are required to comply with the requirements of this section. Parking structures and stairwells are included in the definition of "building" and stairwell shafts and elevators are included in the definition of "all parts of a building."

Exceptions: This section shall not apply to buildings less than 5,000 gross square feet or any building constructed of wood frame, as long as none of the aforementioned buildings make use of any metal frame construction, high radio frequency attenuation glazing and window frames, or any below-grade storage or parking areas.

510.3.2 Any person required to maintain adequate radio coverage as specified in Section 510.3.1 above shall provide prior written notification to the SERS System Manager at the time a building permit application is submitted to the city of Everett. Written evidence of such prior written notification shall be given to the city of Everett Building Official before a building permit application will be accepted.

510.3.3 Persons constructing new or remodeled facilities which include systems intended for providing in-building service for other wireless services shall make provision for including public safety radio signals into such system. This capability shall at a minimum include provision of bidirectional amplification as required. This requirement shall apply to structures of all sizes whenever such in-building wiring or services are to be provided.

510.3.4 No person shall install in buildings of any type or size devices specifically intended to prevent the reception of signals intended for cellular telephones, pagers, wireless communications devices, or public safety radios.

510.3.5 No person shall install or use building materials specifically marketed or engineered to prevent the ingress of radio signals, except where such materials may be required to shield laboratory or research facilities. Use of any such materials in laboratory or research facilities shall be clearly noted in any construction permit application documents and written notification of the use of any such materials shall be provided to SERS at the time of permit application submittal. Signs notifying occupants, emergency services and law enforcement personnel of such shielding conditions shall be conspicuously posted both at the entrance and on the interior of such areas.

510.4. Performance. A study shall be prepared and reviewed prior to plan approval that demonstrates that the signal levels within the proposed structure meet or exceed the criteria established below. When measuring the performance of a bi-directional amplifier, signal strength measurements are based on an input signal from the SERS system adequate to obtain a maximum continuous operating output level. Multiple carrier environments shall take into account the presence of non-SERS signals in the design of the amplifier system. Adequate Radio Coverage shall include all of the following measurement requirements:

1. A minimum signal strength of -95 dBm available in 90% of the area of each floor of the building when transmitted to a belt-worn portable radio equipped with a speaker microphone, from the closest SERS site;
2. A minimum signal strength of -95 dBm received at the closest SERS site when transmitted from a belt-worn portable radio equipped with a speaker microphone from 90% of the area of each floor of the building;
3. The frequency ranges which must be supported shall be 746—824 MHz and 851—869 MHz; and
4. The signal strengths shall be present at a 100% reliability factor at the -95 dBm level.

510.5. Amplification Systems

510.5.1 Buildings and structures that cannot support adequate radio coverage, as identified, shall be equipped with either a radiating cable system or an internal multiple antenna system with FCC type accepted bidirectional amplifiers as needed.

510.5.2 If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of an external AC power input.

510.5.3 SERS may require that bi-directional amplifiers include filters to reduce adjacent band frequency interference at least 35 dB below the channels placed in operation by SERS. Consultation with the SERS System Manager shall be required to determine if the specific installation requires this additional filtering.

510.5.4 The SERS System Manager shall be notified two weeks in advance of when an amplification system is installed and operational.

510.6 Alternative methods. Other acceptable methods of providing in-building coverage may also include construction of low-power 'filler' trunked radio sites that are integrated into the SERS. These alternative approaches may be considered where the use of bi-directional amplifiers proves impractical. Such alternative methods will require the involvement of SERS representatives in the design process. The requirements established by Sections 510.4, 510.5.2, 510.5.3, and 510.5.4 apply to any such alternate methods.

510.7 Additional requirements for new construction or substantial revisions to structures. Any person who constructs or develops a commercial or industrial building or structure of any size and type of construction that is likely to attenuate radio frequency signals shall provide two-inch nonconductive raceways in the walls into which radiating or coaxial cable may be laid. Such raceways shall include an easily accessible opening to the roof surface that

allows for placement of an exterior antenna and riser access within the building core to each floor within the structure.

510.8 Initial Inspection and Signal Strength Acceptance Test Procedures.

510.8.1 When an engineering study performed for the building contractor or owner has determined that an in-building radio system is required, and upon completion of installation, it will be the building owner's responsibility to have the radio system tested to ensure that two-way communications coverage on each floor of the building meets the requirements established in Sections 510.4 and 510.5. Each floor of the building shall be divided into a grid of approximately 20 equal areas. A maximum of two nonadjacent areas will be allowed to fail the test by not meeting the minimum signal levels established in Section 510.4. Testing of parking garages, stairwells, and non-enclosed areas will be performed as separate tests with statistics gathered separately for signal levels in the primary structure and parking areas. Signal levels shall meet the requirements of Section 510.4 for all areas enclosed by the structure and statistical methods shall not be used to dilute the intent of the coverage requirements established in Section 510.4.

510.8.2 In the event that three of the areas fail the test, in order to be more statistically accurate, the floor may be divided into 40 equal areas. In such an event, a maximum of four nonadjacent areas will be allowed to fail the test. After the 40 area test, if the system continues to fail, the building owner shall have the system altered to meet the coverage requirement established in Section 510.4.

510.8.3 The test shall be conducted using a SERS approved portable radio, communicating through the SERS as specified by the authority having jurisdiction. A spot located approximately in the center of a grid area will be selected for the test, then the radio transmitter will be activated to verify two-way communications to and from the outside of the building through the SERS system. Once the spot has been selected, prospecting for a better spot within the grid area will not be permitted.

510.8.4 The gain values of all systems used to support the signal level requirements of Section 510.4 shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results became lost, the building owner will be required to rerun the acceptance test to re-establish that the facility provides the signal levels established in Section 510.4.

510.9 Annual equipment condition testing.

510.9.1 When an in-building radio system is required, the building owner shall test all active components of the system, including but not limited to amplifiers, power supplies, backup batteries, and related equipment, a minimum of once every 12 months. Amplifiers shall be tested to ensure that the gain is the same

as it was upon initial installation and acceptance. These annual tests shall apply to both the bi-directional amplifier method of enhancing signal strength, as well as to any alternative methods that might be employed. The building owner shall notify the SERS System Manager in writing two (2) weeks in advance of when annual tests occur, and shall also notify SERS and the Fire Code Official by certified mail of the results of the test. Test records shall be retained on the inspected premises by the building owner.

510.9.2 Backup batteries and power supplies shall be tested under full load for a period of one hour to verify that, they will properly operate during an actual power outage. If within the one-hour test period, in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one-hour period until the testing technician confirms the integrity of the battery. Alternative load testing which places a higher short-term demand on the battery system may be required upon verbal request by the testing technician. Batteries which fail the load test shall be replaced and retested within 10 working days.

510.9.3 All other active components shall be checked to determine that they are operating within the manufacturer's specifications for the intended purpose.

510.10 Five year signal strength testing.

510.10.1 In addition to the annual test, the building owner shall perform a radio coverage test a minimum of once every five years to ensure that the radio system continues to meet the signal strength requirements of the original acceptance test. The signal levels established in Section 510.4 and the procedures established in Section 510.8 shall apply to such tests. The results of the five-year test will be provided to SERS and the Fire Code Official by certified mail. Test records shall also be retained on the inspected premises by the building owner.

510.10.2 The building owner shall notify the SERS System Manager in writing two weeks in advance of the initial, annual, and five-year tests.

510.11 Qualifications of testing personnel. Tests shall be conducted, documented and signed by a person in possession of a current FCC license, or a current technician certification issued by the Associated Public-Safety Communications Officials International (APCO), the Personal Communications Industry Association (PCIA), or a technician employed by SERS.

510.12 Field testing. Public safety personnel, after providing reasonable notice to the building owner or his representative, shall have the right to enter onto the property to conduct ad-hoc field testing to be certain that the required level of radio coverage is present.

(Ord. 3196-10 Part 4 § 3, 2010)

16.03.040 Amendments to IFC Chapter 9, Fire Protection Systems.

A. Subsection 901.1 of the IFC, entitled "Scope," is hereby deleted and the following inserted in its place:

901.1 Scope and application. The provisions of this chapter shall apply to all occupancies and buildings, shall specify where fire protection systems are required, and shall apply to the design, installation, inspection, operation, testing, and maintenance of all fire protection systems; however, nothing contained in this chapter shall diminish or reduce the requirements of any legally adopted building codes, including state and local amendments, or other City ordinances, resolutions, or regulations. In the event of any conflict in requirements among these codes, ordinances, resolutions, or regulations, the more stringent provision shall apply.

B. Subsection 901.6.1 of the IFC, entitled "Standards," and Table 901.6.1 of the IFC, entitled "Fire Protection System Maintenance Standards," are hereby deleted and the following inserted in their place:

901.6.1 Standards. Fire protection systems shall be inspected, tested, and maintained in accordance with the National Fire Protection Association ("NFPA") standards listed in Table 901.6.1 below.

Table 901.6.1

**FIRE PROTECTION SYSTEM
MAINTENANCE STANDARDS**

SYSTEM	STANDARD
Carbon dioxide fire-extinguishing systems	NFPA 12
Clean agent fire-extinguishing systems	NFPA 2001
Dry chemical fire-extinguishing systems	NFPA 17
Emergency power systems	NFPA 110 & NFPA 111
Fire alarm systems	NFPA 72
Fire doors	NFPA 80
Foam fire-extinguishing systems	NFPA 11
Halogenated fire-extinguishing systems	NFPA 12A
Smoke-control systems	NFPA 92A
Underground fire lines, hydrants, and water-based fire protection systems	NFPA 25

Fire extinguishers	NFPA 10
Water-mist systems	NFPA 750
Wet chemical fire-extinguishing systems	NFPA 17A

C. Subsection 901.6.2 of the IFC, entitled “Records,” is hereby deleted and the following inserted in its place:

901.6.2 Records. Records of all system inspections, tests, and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 5 years. A copy of each inspection, test, or maintenance record shall be forwarded to the Fire Code Official within 30 days of the date the inspection, test, or maintenance occurred.

D. Section 902 of the IFC, entitled “Definitions,” is hereby amended by the addition of the following definition:

FIRE FLOW. A measure of the sustained flow of available water for firefighting at a specific building or within a specific area at 20 pounds-per-square-inch residual pressure.

(Ord. 3196-10 Part 4 § 4, 2010)

16.03.050 Amendments to IFC Chapter 10, Means of Egress.

Section 1004 of the IFC, entitled “Occupant load,” is hereby amended by the addition of the following new subsection 1004.10:

1004.10 Maximum occupant load. The maximum number of occupants in an assembly occupancy as defined by this code may not exceed the occupant load determined in accordance with this section.

(Ord. 3196-10 Part 4 § 5, 2010)

16.03.060 Amendments to IFC Chapter 14, Fire Safety During Construction and Demolition.

Subsection 1412.1 of the IFC, entitled “When required,” is hereby deleted and the following inserted in its place:

1412.1 When required. An approved water supply for fire protection shall be made available as soon as combustible material arrives on the site.

(Ord. 3196-10 Part 4 § 6, 2010)

16.03.070 Amendments to IFC Appendix B, Fire-Flow Requirements for Buildings.

A. Subsection B104.2 of the IFC, entitled “Area separation,” is hereby deleted and the following inserted in its place:

B104.2 Area separation. Portions of buildings which are separated by firewalls without openings, or by minimum three-hour fire barriers with automatic fire

alarm closure initiation, constructed in accordance with the Everett Building Code, are allowed to be considered as separate fire-flow calculation areas.

B. Subsection B105.2 of the IFC, entitled "Buildings other than one- and two-family dwellings," is hereby deleted and the following inserted in its place:

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.

Exceptions:

1. A reduction in required fire-flow up to 75 percent is allowed for permanent NFPA 13-defined Light Hazard and Ordinary Hazard (Group 1) occupancies when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1. This does not apply to buildings having any residential occupancies. 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. Residential occupancies eligible for NFPA 13R sprinkler systems shall be allowed a 75 percent fire-flow reduction if a full NFPA 13 system is installed throughout the residential occupancies and any additional non-separated occupancies, in accordance with 903.3.1.1. The resulting fire-flow shall not be less than 1,500 gallons per minute for the prescribed duration as specified in Table B105.1.

3. Potentially non-permanent commercial NFPA 13-defined Light Hazard and Ordinary Hazard (Group 1), and Ordinary Hazard (Group 2) and Extra Hazard (Groups 1 and 2) occupancies shall have 50 percent of the required fire-flow indicated in Table B105.1 when provided with an automatic sprinkler system in accordance with Section 903.3.1.1. The resulting fire-flow shall not be less than 1,500 gallons per minute for the prescribed duration as specified in Table B105.1.

(Ord. 3196-10 Part 4 § 7, 2010)

16.03.080 Amendments to IFC Appendix D, Fire Apparatus Access Roads.

Subsection D103.3 of Appendix D to the IFC, entitled "Turning radius," is hereby deleted and the following inserted in its place:

D103.3 Turning radius. The fire apparatus access road shall have a 35 foot minimum inside turning radius and a 55 foot minimum outside turning radius.

(Ord. 3196-10 Part 4 § 8, 2010)

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Prior legislation: Ord. 3022-07.

This page of the Everett Municipal Code is current through Ordinance 3211-11, passed March 2, 2011.

Disclaimer: The City Clerk's Office has the official version of the Everett Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

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