

**23.05.100 Permit issuance.**

**A. Issuance.**

1. The application and construction documents filed by an applicant for permit shall be reviewed by the building official. Such plans may be reviewed by other departments of the city to verify compliance with any applicable laws under their jurisdiction. If the building official finds that the work described in an application for a permit and the plans, specifications and other data filed therewith conform to the requirements of this chapter and the technical codes and other pertinent laws and ordinances, and that the fees specified in BCC 23.05.120 have been paid, and the applicant is the correct person to whom a permit may be issued as defined in this chapter, the building official shall issue a permit therefor to the applicant.

2. When a permit is issued when plans are required, the building official shall endorse in writing or stamp the plans and specifications "Approved." Approved construction documents shall not be changed, modified or altered without authorizations from the building official, and all work regulated by this chapter and the technical codes shall be done in accordance with the approved construction documents.

3. The building official may issue a permit for the construction of foundations or any other part of a building or structure or building service equipment before the construction documents for the whole building, structure or building service equipment have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this chapter and the technical codes. The holder of such partial permit shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire building, structure or building service will be granted.

**B. To Whom Permit Issued.**

Permits shall be issued only to a person, firm or corporation who demonstrates to the satisfaction of the building official that he/she is properly licensed, or exempt, as required by Chapter 18.27 RCW, now or as hereafter amended, or to a person doing work at his/her own residence or place of business or other property owned by him/her; provided further, no such person, firm or corporation shall employ any unlicensed person, firm or corporation to perform the work authorized by the permit.

**C. Retention of Plans.**

One set of approved construction documents shall be retained by the building official for the period required by law, and one set of approved construction documents shall be returned to the applicant and shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

**D. 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 this chapter or the technical codes or of any other ordinance of the city. Permits presuming to give authority to violate or cancel the provisions of this chapter, the technical codes, or other ordinances of the city 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 which is in violation of this chapter, the technical codes, or of any other ordinances of the city.

**E. Expiration of Permit.**

1. Every permit issued by the building official under the provisions of this chapter shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within one year from the date of such permit, or if work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days except that the building official may extend single-family permits for an additional period of up to 180 days at his sole discretion.

2. Permits issued under which work is continuously performed and the necessary periodic inspections are made shall be extended beyond the one-year period by the building official for a period of no more than one year. No more than two one-year extensions shall be granted except that the building official may extend single-family permits for an additional period of up to 90 days at his sole discretion.

**F. Suspension or Revocation.**

1. The building official may revoke or suspend the permit provided for in this section whenever:

- a. The permittee requests such revocation or suspension;
- b. The work does not proceed in accordance with the construction documents, as approved, or is not in compliance with the requirements of this section, the technical codes or other city ordinances;
- c. Entry upon the property for the purpose of investigation or inspection has been denied;
- d. The permittee has made a misrepresentation of a material fact in applying for such permit;
- e. The progress of the work indicates that the plan is or will be inadequate to protect the public, the adjoining property, street, utilities in the street, or the work endangers or will endanger the public, the adjoining property, street or utilities in the street;

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f. The permit has not been acted upon within the time allowed for extensions pursuant to this section; and

g. The related building permit has expired without renewal, or has been revoked or canceled.

2. Upon suspension or revocation of the permit, all work thereupon shall cease, except as authorized by the building official.

**G. Assurance Device for Permits.**

Before issuing any permit provided for in this section, the city may, in the discretion of the building official, require the applicant to execute and file with the city an assurance device pursuant to Land Use Code Section 20.40.490 in such reasonable sum and with the securities as the responsible administrative official may specify, conditioned that the applicant will pay any and all damages that may be recovered against the city by any person on account of injury to persons or property occasioned by or in any manner resulting from the issuance of the permit or by reason of any act or thing done pursuant thereto, or from the occupancy or disturbance of any street or sidewalk in the city and also to save and keep the city free from all such damages and costs as may be incurred in defending any such claim, and/or further conditioned that the applicant will pay to the city the cost of repairing any and all damage which may be done by the applicant or his agents to the streets, utilities or property of the city during or pursuant to the work covered by such permit.

**H. Placement of Permit.**

The permit or copy shall be kept on the site of the work until the completion of the project. Approved plans and manufacturer's installation instructions, as required by the technical codes, shall be available on the job site at the time of inspection.

Section 2. Section 23.05.160 of the Bellevue City Code is hereby amended to read as follows:

**23.05.160 Hearing Examiner.**

Pursuant to Chapter 3.68 BCC the hearing examiner shall hear and decide appeals of interpretations of the technical codes made by the building official, as provided in Chapter 3.68 BCC; provided, however, that appeals of interpretations made by the building official in proceedings authorized under Chapter 1.18 BCC shall be heard simultaneously with the underlying action before the hearing examiner presiding over the proceeding.

## Bellevue Building Code Amendments

Section 3. Chapter 23.10 of the Bellevue City Code is hereby repealed in its entirety and replaced with a new Chapter 23.10 which reads as follows:

### **Chapter 23.10 BUILDING CODE**

#### **Sections:**

- 23.10.010** Amendments and Adoptions.
- 23.10.015** Amendments, Additions, or Exceptions to the 2006 International Building Code and International Residential Code.
- 23.10.403** International Building Code Table 403(1) Added – Standby (Legally Required) and Emergency Power.
- 23.10.403.3.1** International Building Code Section 403.3.1 Amended – Type of Construction.
- 23.10.403.10** International Building Code Section 403.10 Amended – Standby Power.
- 23.10.403.11** International Building Code Section 403.11 Amended – Emergency power loads.
- 23.10.403.15** International Building Code Section 403.15 Added -- Smoke Control.
- 23.10.405.1** International Building Code Section 405.1 Amended – General.
- 23.10.405.9** International Building Code Section 405.9 Amended – Standby Power.
- 23.10.405.10** International Building Code Section 405.10 Amended – Emergency power.
- 23.10.503** International Building Code Table 503 Amended -- Allowable Height and Building Areas.
- 23.10.707.2** International Building Code Section 707.2 Amended -- Shaft Enclosure Required.
- 23.10.707.14.1** International Building Code Section 707.14.1 Amended -- Elevator Lobby.
- 23.10.707.14.2.1** International Building Code Section 707.14.2.1 Amended – Pressurization Requirements.
- 23.10.707.14.2.2** International Building Code Section 707.14.2.2 Amended – Duct for System.
- 23.10.707.14.2.3.4** International Building Code Section 707.14.2.3.4 Amended – Fan Capacity.
- 23.10.806.1** International Building Code Section 806.1 Amended – General requirements.
- 23.10.903.2** International Building Code Section 903.2 Amended – Where required.
- 23.10.903.2.10** International Building Code Section 903.2.10 Amended – Automatic fire extinguishing systems.
- 23.10.903.3.1.1.1** International Building Code Section 903.3.1.1.1 Amended – Exempt locations.
- 23.10.903.3.1.1.2** International Building Code Section 903.3.1.1.2 Amended - High Rise Building Sprinkler System Design.

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Effective 7/07

## Bellevue Building Code Amendments

- 23.10.903.3.1.4** International Building Code Section 903.3.1.4 Added – Fire Pump Boosted System Design.
- 23.10.903.3.3** International Building Code Section 903.3.3 Amended – Obstructed locations.
- 23.10.903.4.2** International Building Code Section 903.4.2 Amended – Alarms.
- 23.10.903.4.3** International Building Code Section 903.4.3 Amended – Floor control valves.
- 23.10.903.5.2** International Building Code Section 903.3.5.2 Amended - Secondary Water Source.
- 23.10.905.3** International Building Code Section 905.3 Amended to add new subsection 905.3.8 – High-rise building standpipes.
- 23.10.905.4** International Building Code Section 905.4 Amended – Location of Class I standpipe hose connections.
- 23.10.905.8** International Building Code Section 905.8 Amended – Dry standpipes.
- 23.10.907.1** International Building Code Section 907.1 Amended – General
- 23.10.907.2.7.1** International Building Code Section 907.2.7.1 Not Adopted - Occupant notification.
- 23.10.907.2.12.1** International Building Code Section 907.2.12.1 Amended – Automatic fire detection.
- 23.10.907.2.18.1** International Building Code Section 907.2.18.1 Amended – Smoke Detectors.
- 23.10.907.6** International Building Code Section 907.6 Amended – Activation.
- 23.10.907.8.1** International Building Code Section 907.8.1 Amended – Annunciator Panel.
- 23.10.909.1** International Building Code Section 909.1 Amended – Scope and Purpose.
- 23.10.909.4.6** International Building Code Section 909.4.6 amended – Duration of operation.
- 23.10.909.10.3** International Building Code Section 909.10.3 Amended – Equipment, Inlets and Outlets.
- 23.10.909.11** International Building Code Section 909.11 Amended – Power systems.
- 23.10.909.20** International Building Code Section 909.20 Amended – Smokeproof enclosures.
- 23.10.909.20.5** International Building Code Section 909.20.5 Amended – Stair Pressurization Alternative.
- 23.10.909.20.6.1** International Building Code Section 909.20.6.1 Amended – Ventilation System.
- 23.10.909.20.6.3** International Building Code Section 909.20.6.3 Amended – Acceptance and Testing.
- 23.10.912.4** International Building Code Section 912.4 Amended – Signs.
- 23.10.1006.3** International Building Code Section 1006.3 Amended – Illumination emergency power.
- 23.10.1011.5.3** International Building Code Section 1011.5.3 Amended – Power source.

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## Bellevue Building Code Amendments

- 23.10.1608.1** International Building Code Section 1608.1 Amended -- General.
- 23.10.1613.1** International Building Code Section 1613.1 Amended – Scope.
- 23.10.1704.1** International Building Code Section 1704.1 Amended – General.
- 23.10.1704.12** International Building Code Section 1704.12 Amended – Exterior Insulation and Finish Systems (EIFS).
- 23.10.2306.4.1** International Residential Code Table 2306.4.1 Amended – Climatic and Geographic Design Criteria.
- 23.10.3002.4** International Building Code Section 3002.4 Amended – Elevator car to accommodate ambulance stretcher.
- 23.10.3304.1** International Building Code Section 3304.1 Amended – Excavation and Fill.



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**23.10.010 Amendments and Adoptions.**

The following codes, all as amended, added to, or excepted in this chapter, together with all amendments and additions provided in this title of this code, are adopted and shall be applicable within the city:

**A. International Building Code.**

1. **Code Adoption.** The 2006 edition of the International Building Code published by the International Code Council, as adopted and amended by the State Building Code Council in Chapter 51-50 WAC, excluding chapter 1 “Administration”, is adopted and shall be applicable within the city, as amended, added to and excepted in this chapter. Those sections of the 2006 edition of the International Building Code that are not being adopted by the City (except Chapter 1 referenced above) are listed in consequential order with the City’s local amendments.

2. **Scope.** The provisions of the International Building Code as adopted, amended, added to, or excepted in this chapter shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

3. **Exception.** In addition to satisfying the requirements set forth in the International Building Code as adopted by the City, detached one and two family dwellings, multiple single-family dwellings (townhouses), and accessory structures thereto, shall not exceed three stories above grade in height and separate means of egress shall comply with the International Residential Code.

**B. International Residential Code**

1. **Code Adoption.** The 2006 edition of the International Residential Code published by the International Code Council, as adopted and amended by the State Building Code Council in Chapter 51-51 WAC, excluding chapter 1 “Administration” is adopted, together with Appendix Chapter G “Swimming Pools, Spas and Hot Tubs” and shall be applicable within the city, as amended, added to and excepted in this chapter.

2. **Scope.** The provisions of the International Residential Code as adopted, amended, added to, or excepted in this chapter, shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures, including adult family homes, foster family care homes and family day care homes licensed by the Washington state department of social and health services.

**C. Washington State Energy Code.**

**1. Code Adoption.** Washington State Energy Code, as provided in RCW 19.27A.010(6) and as adopted by the 2006 State Building Code Council in Chapter 51-11 WAC is adopted and shall be applicable within the city, as amended, added to, or excepted in this chapter.

**2. Scope.** The Washington State Energy Code sets forth minimum requirements for the design of new buildings and structures that provide facilities or shelter for residential occupancies by regulating their exterior envelopes and the selection of their HVAC, service water heating systems and equipment for efficient use and conservation of energy.

**D. Ventilation and Indoor Air Quality Code.**

**1. Code Adoption.** The Washington State Ventilation and Indoor Air Quality Code, as provided in Chapter 19.27A RCW and adopted by the 2006 State Building Code Council in Chapter 51-13 WAC, is adopted and shall be applicable within the city, as amended, added to, or excepted in this chapter.

**2. Scope.** The Washington State Ventilation and Indoor Air Quality Code as adopted, amended, added to, or excepted in this chapter, sets forth minimum requirements for ventilation in all occupancies, including the design of new construction.

**E. Abatement of Dangerous Building Code.**

**1. Code Adoption.** The 1997 edition of the Uniform Code for the Abatement of Dangerous Buildings Code published by the International Council of Building Officials, except for Section 205 and Chapters 5, 6, 7, 8, and 9 is adopted and shall be applicable within the city, as amended, added to, or excepted in this chapter.

**2. Scope.** The 1997 edition of the Uniform Code for the Abatement of Dangerous Buildings Code as adopted, amended, added to, or excepted in this chapter, provides equitable remedies consistent with other laws for the repair, vacation or demolition of dangerous buildings.

**F. Uniform Housing Code.**

**1. Code Adoption.** The 1997 edition of the Uniform Housing Code as published by the International Conference of Building Officials, except Sections 104, 201.1, 201.2, 203, 302, and Chapters 12, 13, 14, 15 and 16, is adopted and shall be applicable within the city, as amended, added to, or excepted in this chapter.

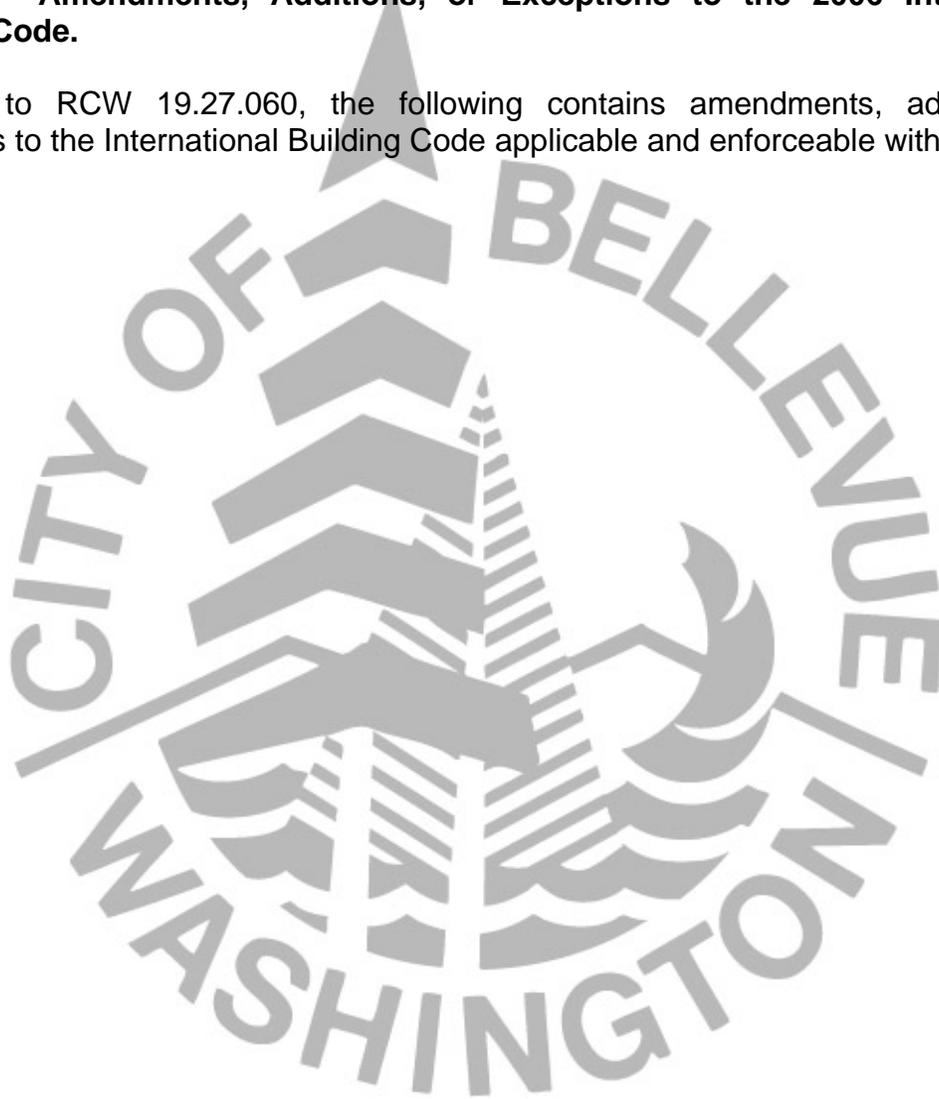
**2. Scope.** The 1997 edition of the Uniform Housing Code as adopted, amended, added to, or excepted in this chapter, provides requirements affecting conservation and rehabilitation of housing.

**G. Adoption by Reference.**

All codes, standards, rules and regulations adopted by this section are adopted by reference thereto as by this reference fully incorporated herein. Not less than one copy of each code, standard, rule or regulation, in the form in which it was adopted, and suitably marked to indicate amendments, additions, deletions and exceptions as provided in this chapter, shall be filed in the city clerk's office and be available for use and examination by the public.

**23.10.015 Amendments, Additions, or Exceptions to the 2006 International Building Code.**

Pursuant to RCW 19.27.060, the following contains amendments, additions, or exceptions to the International Building Code applicable and enforceable within the city.



(Insert facing page 1I)

**Bellevue Building Code Amendments**

**23.10.403 International Building Code Table 403(1) Added – Standby (Legally Required) and Emergency Power.**

TABLE 403(1)

Standby (Legally Required) and Emergency Power

<u>Type of equipment</u>	<u>Maximum Time to Energize Loads</u>	<u>Minimum Run Time (Duration)</u>	<u>IBC Section</u>	<u>IFC or NFPA Section</u>
<b>Emergency Power Systems 1</b>				
<u>Exit signs</u>	<u>10 seconds</u>	<u>2 hours for generator power; or 90 minutes for battery backup.</u>	<u>1011.5.3</u>	<u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u> <u>1011.5.3</u> <u>2403.12.6.1 Temporary tents, canopies, membrane structures</u>
<u>Exit illumination</u>	<u>10 seconds</u>	<u>8 hours</u>	<u>1006.3</u>	<u>1006.3</u> <u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u>
<u>Any emergency voice/alarm communication including area of refuge communication systems (barrier-free &amp; horizontal exits)</u>	<u>NFPA 72</u>	<u>24 hours</u>	<u>402.12 Covered mall buildings</u> <u>403.11 High rises</u> <u>405.10 Underground buildings</u> <u>907.2.1.2 Assembly occupancies</u>	<u>604.2.14 Covered mall buildings</u> <u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u> <u>907.2.1.2 Assembly occupancies</u> <u>NFPA 72</u>
<u>Fire detection and fire alarms</u>	<u>NFPA 72</u>	<u>24 hours</u>	<u>403.11 High rises</u> <u>405.10 Underground buildings</u> <u>909.20.6.2 Smokeproof enclosures</u> <u>907</u>	<u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u> <u>907.2.8.3 and 907.2.10.2</u> <u>NFPA 72</u>
<u>Smoke control systems in high-rise buildings, underground buildings and covered mall buildings including energy management systems is used for smoke control or smoke removal</u>	<u>60 seconds</u>	<u>2 hours</u>	<u>403.11 High rises</u> <u>404.6 Atriums</u> <u>405.10 Underground buildings</u> <u>909.11 Smoke control</u>	<u>909.11</u>
<u>Fire pumps in high-rise buildings &amp; underground buildings</u>	<u>10 seconds</u>	<u>8 hours (NFPA 20)</u>	<u>403.11 High rises</u> <u>405.10 Underground buildings</u>	<u>604.2.15 High rises and NFPA 20</u> <u>604.2.16 Underground buildings</u> <u>913.2 All Fire Pumps</u>
<u>Smokeproof enclosures and elevator shaft pressurization</u>	<u>60 seconds for ventilation</u>	<u>4 hours</u>	<u>403.11 High rises</u> <u>909 and 909.20.6.2</u>	
<u>Any shaft exhaust fans required to run continuously in lieu of dampers</u>	<u>60 seconds</u>	<u>4 hours</u>	<u>716</u>	
<u>Elevator car operation in high-rise &amp; underground buildings (including control system, motor controller, operation control, signal equipment, machine room cooling/heating, etc.)</u>	<u>60 seconds</u>	<u>4 hours</u>	<u>3003</u>	<u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u>
<u>Elevator car lighting and communications in high-rise &amp; underground buildings</u>	<u>10 seconds</u>	<u>4 hours</u>	<u>3003</u>	<u>604.2.15 High rises</u> <u>604.2.16 Underground buildings</u> <u>604.2.19 Elevators</u>
<u>Lights, heating, and cooling for building fire command center and mechanical equipment rooms serving the fire command center</u>	<u>60 seconds</u>	<u>24 hours</u>		<u>604.2.15 High rises</u>
<u>Power (other than lights, heating and cooling) for building fire command center</u>	<u>60 seconds</u>	<u>4 hours</u>		
<u>Mechanical and electrical systems required by IFC 27 (hazardous materials including UPS rooms)</u>	<u>60 seconds</u>	<u>4 hours</u>		<u>Article 27</u>

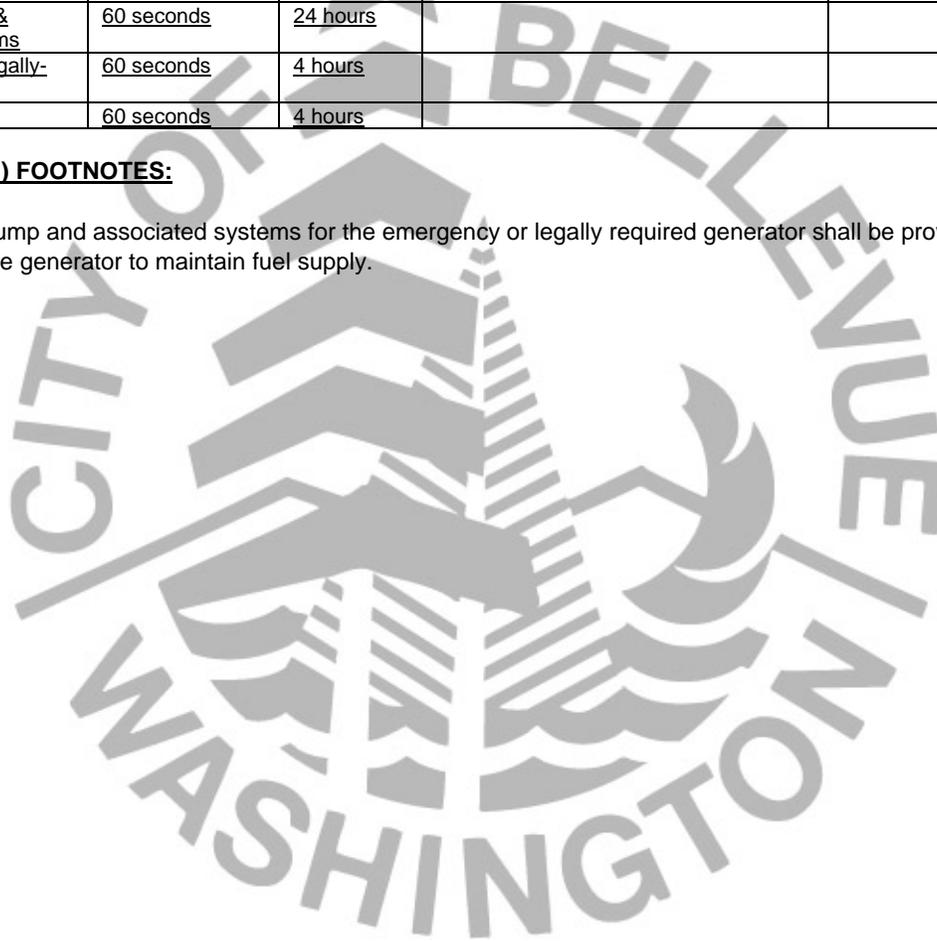
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## Bellevue Building Code Amendments

<u>Type of equipment</u>	<u>Maximum Time to Energize Loads</u>	<u>Minimum Run Time (Duration)</u>	<u>IBC Section</u>	<u>IFC or NFPA Section</u>
<b>Emergency Power Systems 1</b>				
<b>Legally Required Standby<sup>1</sup></b>				
Pressurization equipment for low-rise buildings	60 seconds	4 hours	909 909.20	
Exhaust fans for any loading dock located interior to a building	60 seconds	4 hours		
Operation of elevators used as accessible means of egress in low-rise buildings (including car lighting, communications, control system, motor controller, operation control, signal equipment, machine room cooling/heating, etc.)	60 seconds	4 hours	1007.4 & .5 3003	604.2.19 Elevators 1007.4 & .5
Fire pumps in low-rise buildings	10 seconds	8 hours		913.2 and NFPA 20
Transformer vault ventilation equipment	60 seconds	4 hours		
Heat tape for sprinkler lines & heating in sprinkler riser rooms	60 seconds	24 hours		
Fuel pump system for any legally-required system	60 seconds	4 hours		
Sewage disposal pumps	60 seconds	4 hours		

**TABLE 403(1) FOOTNOTES:**

1. The fuel pump and associated systems for the emergency or legally required generator shall be provided with power from the generator to maintain fuel supply.



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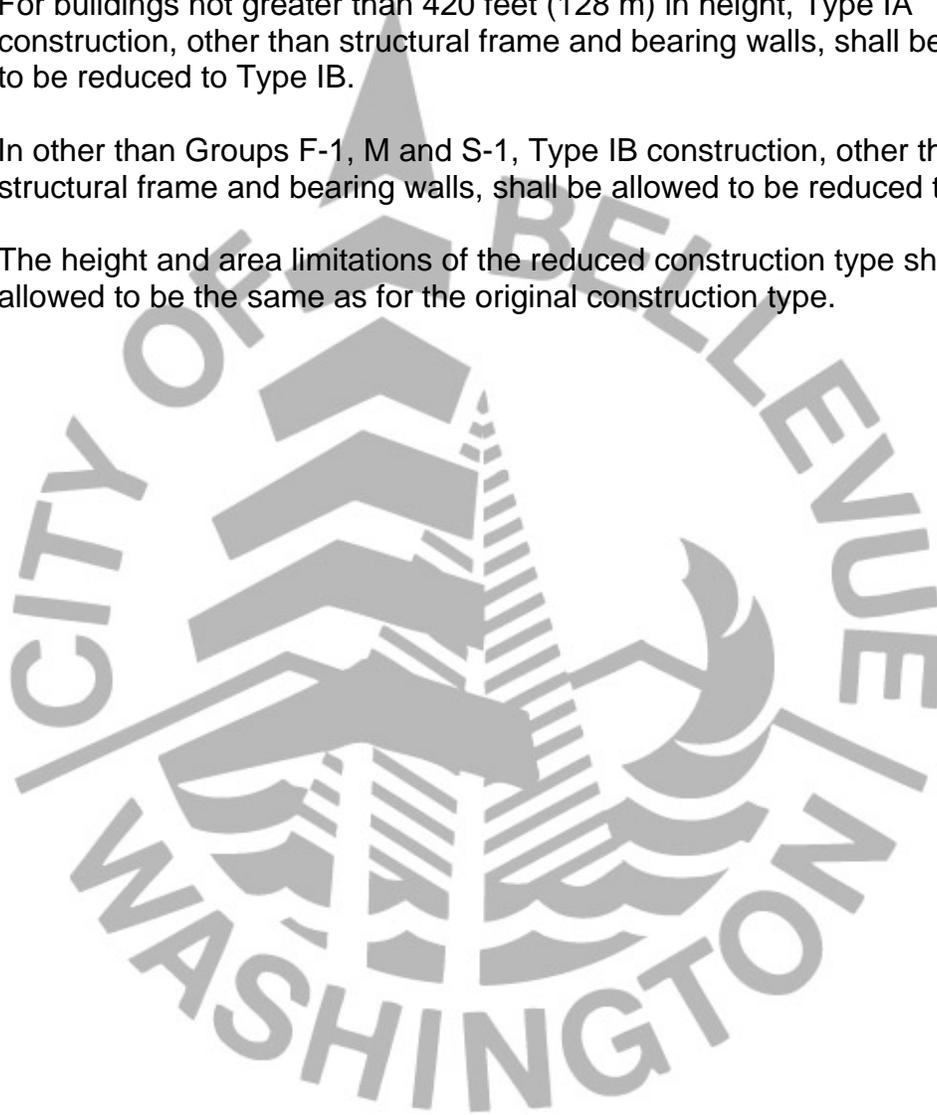
Effective 7/07

**23.10.403.3.1 International Building Code Section 403.3.1 Amended – Type of construction.**

International Building Code Section 403.3.1 is hereby amended to read as follows:

*403.3.1 Type of construction.* The following reductions in the minimum construction type allowed in Table 601 shall be allowed as provided in Section 403.3:

1. For buildings not greater than 420 feet (128 m) in height, Type IA construction, other than structural frame and bearing walls, shall be allowed to be reduced to Type IB.
2. In other than Groups F-1, M and S-1, Type IB construction, other than structural frame and bearing walls, shall be allowed to be reduced to Type IIA.
3. The height and area limitations of the reduced construction type shall be allowed to be the same as for the original construction type.



(Insert facing page 40C)

**23.10.403.10 International Building Code Section 403.10 Amended -- Standby Power.**

International Building Code Section 403.10 is hereby amended to read as follows:

*403.11 Emergency power systems.* A standby power system complying with Table 403(1), and NFPA 70 (National Electrical Code) Article 701 Legally Required Standby Power except as designated in Table 403(1), shall be provided.

*403.10.1 Special requirements for standby power systems.* If the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both, and shall be in a separate room from the normal power source including transformers and distribution equipment. Power distribution from the emergency source to the emergency transfer switch shall be by an independent route from the normal power source. System supervision with manual start and transfer features shall be provided at the fire command center.

Standby power shall be provided for elevators in accordance with Section 3003. Fuel-fired standby power generator sets and associated fuel storage, including optional landlord- or tenant-owned generator sets, located more than 75 feet above the lowest level of Fire Department vehicle access, requires the approval of the fire code official.

**23.10.403.11 International Building Code Section 403.11 Amended – Emergency power loads.**

International Building Code Section 403.11 is hereby amended to read as follows:

*403.11 Emergency power systems.* An emergency power system complying with Table 403(1), and NFPA 70 (National Electrical Code) Article 700 Emergency Standby Power except as designated in Table 403(1), shall be provided. Fire pumps shall comply with NFPA 20 and NFPA 70 Article 695.

*403.11.1 Special requirements for emergency power systems.* If the emergency power system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both, and shall be in a separate room from the normal power source including transformers and distribution equipment. Power distribution from the emergency source to the emergency transfer switch shall be by an independent route from the normal power source. System supervision with manual start and transfer features shall be provided at the fire command center.

(Insert facing page 40D)

## Bellevue Building Code Amendments

Fuel-fired emergency generator sets and associated fuel storage, including optional landlord- or tenant-owned generator sets, located more than 75 feet above the lowest level of Fire Department vehicle access, requires the approval of the fire code official.

### **23.10.15 International Building Code Section 403.15 Added -- Smoke Control.**

International Building Code Section 403 is hereby amended to add a new subsection 403.15 to read as follows:

*403.15 Smoke control.* A smoke-control system meeting the requirements of Section 909 shall be provided.



(Insert facing page 40E)

Effective 7/07

**23.10.405.1 International Building Code Section 405.1 Amended – General.**

International Building Code Section 405.1 is hereby amended to read as follows:

*405.1 General.* The provisions of this section apply to building spaces having a floor level used for human occupancy more than 30 feet (9144 mm) below the lowest level of exit discharge.

*Exceptions:*

1. One- and two-family dwellings, sprinklered in accordance with Section 903.3.1.3.
2. Parking garages with automatic sprinkler systems in compliance with Section 405.3 and pressurized stair enclosures provided with emergency power in compliance with Sections 909.20, 909.20.5, and 909.20.6.
3. Fixed guideway transit systems.
3. Grandstands, bleachers, stadiums, arenas and similar facilities.
4. Where the lowest story is the only story that would qualify the building as an underground building and has an area not exceeding 1,500 square feet (139 m<sup>2</sup>) and has an occupant load less than 10.

**23.10.405.9 International Building Code Section 405.9 Amended -- Standby Power.**

International Building Code Section 405.9 is hereby amended to read as follows:

*405.9 Standby power.* A standby power system complying with Table 403(1), and NFPA 70 (National Electrical Code) Article 701 Legally Required Standby Power except as designated in Table 403(1), shall be provided.

*405.9.1 Special requirements for standby power systems.* If the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both, and shall be in a separate room from the normal power source including transformers and distribution equipment. Power distribution from the emergency source to the emergency transfer switch shall be by an independent route from the normal power source. System supervision with manual start and transfer features shall be provided at the fire command center.

Fuel-fired standby power generator sets and associated fuel storage, including optional landlord- or tenant-owned generator sets, located at a floor level more than 30 feet below the lowest level of exit discharge requires the approval of the Fire Code Official.

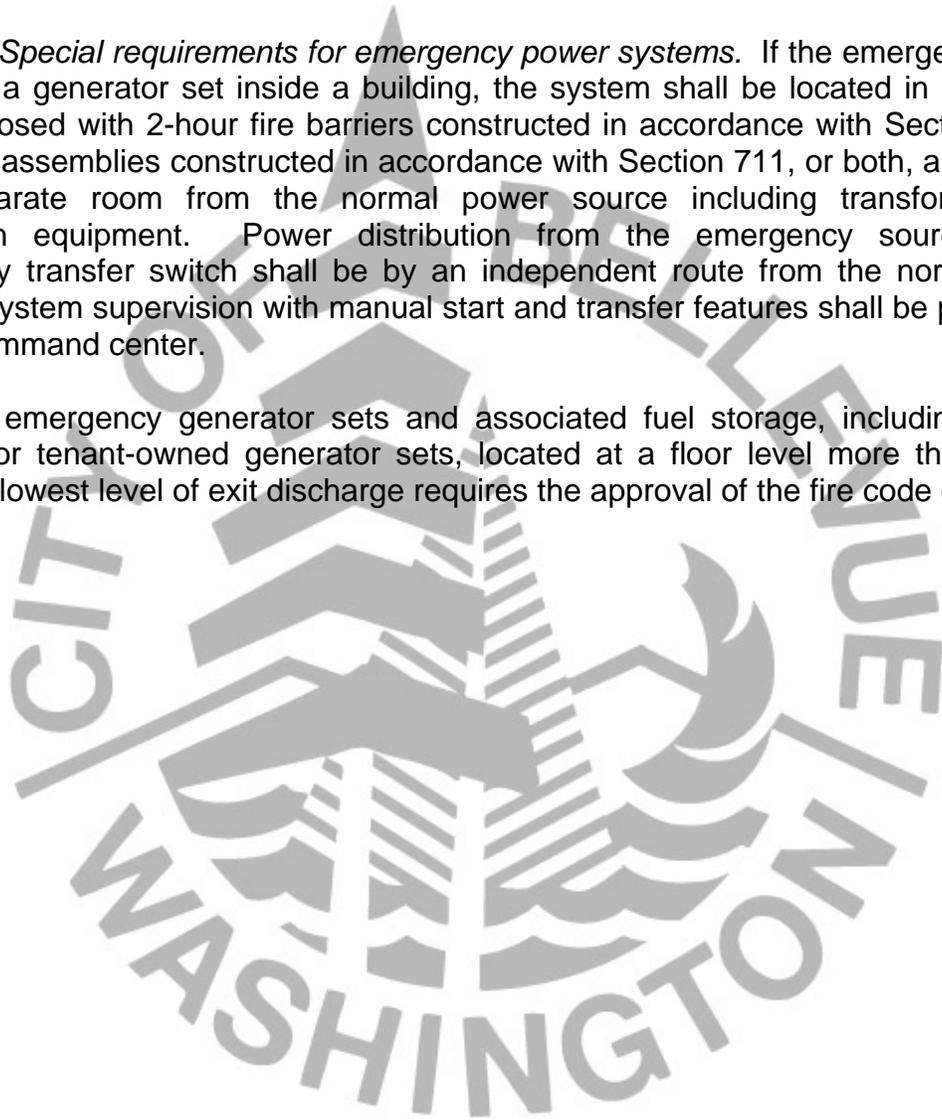
**23.10.405.10 International Building Code Section 405.10 Amended – Emergency power.**

International Building Code Section 405.10 is hereby amended to read as follows:

*405.10 Emergency power.* An emergency power system complying with Table 403(1), and NFPA 70 (National Electrical Code) Article 700 Emergency Standby Power except as designated in Table 403(1), shall be provided. Fire pumps shall comply with NFPA 20 and NFPA 70 Article 695.

*405.10.1 Special requirements for emergency power systems.* If the emergency power system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both, and shall be in a separate room from the normal power source including transformers and distribution equipment. Power distribution from the emergency source to the emergency transfer switch shall be by an independent route from the normal power source. System supervision with manual start and transfer features shall be provided at the fire command center.

Fuel-fired emergency generator sets and associated fuel storage, including optional landlord- or tenant-owned generator sets, located at a floor level more than 30 feet below the lowest level of exit discharge requires the approval of the fire code official.



**Bellevue Building Code Amendments**

**23.10.503 International Building Code Table 503 Amended – Allowable Height and Building Areas.**

International Building Code Table 503, Allowable Height and Building Areas, is amended to read as follows:

<b>TABLE 503</b>										
<b>ALLOWABLE HEIGHT AND BUILDING AREAS<sup>a</sup></b>										
Height limitations shown as stories and feet above grade plane.										
Area limitations as determined by the definition of "Area, building," per story.										
GROUP	Hgt(feet) Hgt(S)	TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
		UL	160	65	55	65	55	65	50	40
A-1	S A	UL UL	5 UL	3 15,500	2 8,500	3 14,000	2 8,500	3 15,000	2 11,500	1 5,500
A-2	S A	UL UL	11 UL	3 15,500	2 9,500	3 14,000	2 9,500	3 15,000	2 11,500	1 6,000
A-3	S A	UL UL	11 UL	3 15,500	2 9,500	3 14,000	2 9,500	3 15,000	2 11,500	1 6,000
A-4	S A	UL UL	11 UL	3 15,500	2 9,500	3 14,000	2 9,500	3 15,000	2 11,500	1 6,000
A-5	S A	UL UL	UL UL	UL UL	UL UL	UL UL	UL UL	UL UL	UL UL	UL UL
B	S A	UL UL	11 UL	5 37,500	4 23,000	5 28,500	4 19,000	5 36,000	3 <sup>e</sup> 18,000	2 9,000
E	S A	UL UL	5 UL	3 26,500	2 14,500	3 23,500	2 14,500	3 25,500	1 18,500	1 9,500
F-1	S A	UL UL	11 UL	4 25,000	2 15,500	3 19,000	2 12,000	4 33,500	2 14,000	1 8,500
F-2	S A	UL UL	11 UL	5 37,500	3 23,000	4 28,500	3 18,000	5 50,500	3 21,000	2 13,000
H-1	S A	1 21,000	1 16,500	1 11,000	1 7,000	1 9,500	1 7,000	1 10,500	1 7,500	NP NP
H-2 <sup>d</sup>	S A	UL 21,000	3 16,500	2 11,000	1 7,000	2 9,500	1 7,000	2 10,500	1 7,500	1 3,000
H-3 <sup>d</sup>	S A	UL UL	6 60,000	4 26,500	2 14,000	4 17,500	2 13,000	4 25,500	2 10,000	1 5,000
H-4	S A	UL UL	7 UL	5 37,500	3 17,500	5 28,500	3 17,500	5 36,000	3 18,000	2 6,500
H-5	S A	4 UL	4 UL	3 37,500	3 23,000	3 28,500	3 19,000	3 36,000	3 18,000	2 9,000
I-1	S A	UL UL	9 55,000	4 19,000	3 10,000	4 16,500	3 10,000	4 18,000	3 10,500	2 4,500
I-2	S A	UL UL	4 UL	2 15,000	1 11,000	1 12,000	NP NP	1 12,000	1 9,500	NP NP
I-3	S A	UL UL	4 UL	2 15,000	1 10,000	2 10,500	1 7,500	2 12,000	2 7,500	1 5,000
I-4	S A	UL UL	5 60,500	3 26,500	2 13,000	3 23,500	2 13,000	3 25,500	1 18,500	1 9,000
M	S A	UL UL	11 UL	4 21,500	4 12,500	4 18,500	4 12,500	4 20,500	3 14,000	1 9,000
R-1	S A	UL UL	11 UL	4 24,000	4 16,000	4 24,000	4 16,000	4 20,500	3 <sup>e</sup> 12,000	2 7,000
R-2	S A	UL UL	11 UL	4 24,000	4 16,000	4 24,000	4 16,000	4 20,500	3 <sup>e</sup> 12,000	2 7,000
R-3	S A	UL UL	11 UL	4 UL	4 UL	4 UL	4 UL	4 UL	3 UL	3 UL

(Insert facing page 76A)

**Bellevue Building Code Amendments**

<b>TABLE 503</b>										
<b>ALLOWABLE HEIGHT AND BUILDING AREAS<sup>a</sup></b>										
Height limitations shown as stories and feet above grade plane. Area limitations as determined by the definition of "Area, building," per story.										
		TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
GROUP	Hgt(feet)									
	Hgt(S)	UL	160	65	55	65	55	65	50	40
R-4	S									
	A									
		UL	11	4	4	4	4	4	3	2
		UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000	7,000
S-1	S	UL	11	4	3	3	3	4	3	1
	A	UL	48,000	26,000	17,500	26,000	17,500	25,500	14,000	9,000
S-2 <sup>b,c</sup>	S	UL	11	5	4	4	4	5	4	2
	A	UL	79,000	39,000	26,000	39,000	26,000	38,500	21,000	13,500
U <sup>c</sup>	S	UL	5	4	2	3	2	4	2	1
	A	UL	35,500	19,000	8,500	14,000	8,500	18,000	9,000	5,500

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>.

UL = Unlimited, NP = Not permitted.

- a. See the following sections for general exceptions to Table 503:
  1. Section 504.2, Allowable height increase due to automatic sprinkler system installation.
  2. Section 506.2, Allowable area increase due to street frontage.
  3. Section 506.3, Allowable area increase due to automatic sprinkler system installation.
  4. Section 507, Unlimited area buildings.
- b. For open parking structures, see Section 406.3.
- c. For private garages, see Section 406.1.
- d. See Section 415.5 for limitations.
- e. For Group B, Group R, Division 1 and Division 2 Occupancies, the permitted increase of one story allowed by Section 504.2 may be increased to two stories and the maximum building height may be increased by 20 feet when all of the following conditions are met:
  1. An automatic fire-extinguishing system complying with Section 903.3.1.1 (NFPA 13) is installed throughout with the installation of quick-response sprinkler heads in all areas where the use of these heads is allowed by NFPA 13.
  2. Vertical exit enclosures are constructed as pressurized stair enclosures in accordance with Section 909.20.
  3. Standby power is supplied for light, emergency, and any exit enclosure pressurization systems used, as provided in Table 403(1) and 909.20.6.2, and the adopted edition of the National Electrical Code. The generator and automatic transfer switch shall be separated from the rest of the building by 1-hour fire-resistive construction.
  4. Fire Department access shall be in accordance with the International Fire Code, 2006 Edition, and the Bellevue Fire Department Development Standards.
  5. Structural Observation is provided during construction in accordance with Sections 1702 and 1709.

**(Insert facing page 76B)**

**23.10.707.2 International Building Code Section 707.2 Amended -- Shaft Enclosure Required.**

International Building Code Section 707.2, Exception 2.1 is hereby amended to read as follows:

Exception 2.1. Where the area of the floor opening between stories does not exceed twice the horizontal projected area of the escalator or stairway and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13, floor openings may connect not more than six stories in Group M occupancies, and in other than Group M occupancies, floor openings may connect not more than four stories in buildings not required to have smoke control systems, and not more than two stories in buildings required to have smoke control systems, except as allowed for atriums.



(Insert facing page 97)

**23.10.707.14.1 International Building Code Section 707.14.1 Amended -- Elevator lobby.**

International Building Code Section 707.14.1 is hereby amended as follows:

*707.14.1 Elevator lobby.* An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have means of egress complying with Chapter 10 and other provisions within this code.

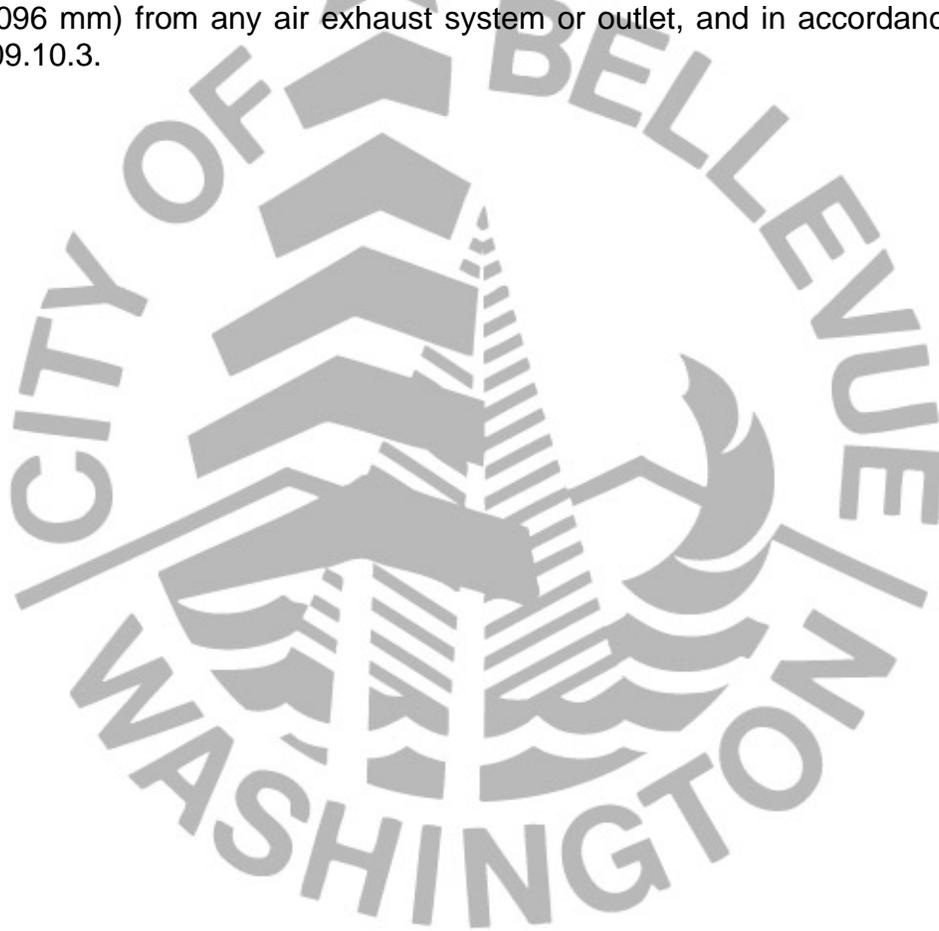
*Exceptions:*

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2 and vertical exit enclosures are pressurized in accordance with Section 909.20.5, and the building is equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1.

**23.10.14.2.1 International Building Code Section 707.14.2.1 Amended – Pressurization requirements.**

International Building Code Section 707.14.2.1 is hereby amended as follows:

*707.14.2.1 Pressurization requirements.* Elevator hoistways shall be pressurized to maintain a minimum positive pressure of 0.10 inches of water column with respect to adjacent occupied space on all floors and a maximum pressure so as to not prevent the automatic operation of the elevator doors, as well as accounting for the stack and wind effect expected on the mean low temperature January day. This pressure shall be measured at the midpoint of each hoistway door, with all hoistway doors open at the designated primary recall level and all other hoistway doors closed. The supply air intake shall be from an outside, uncontaminated source located a minimum distance of 20 feet (6096 mm) from any air exhaust system or outlet, and in accordance with IBC Section 909.10.3.



(Insert facing page 99B)

**23.10.14.2.2 International Building Code Section 707.14.2.2 Amended – Ducts for system.**

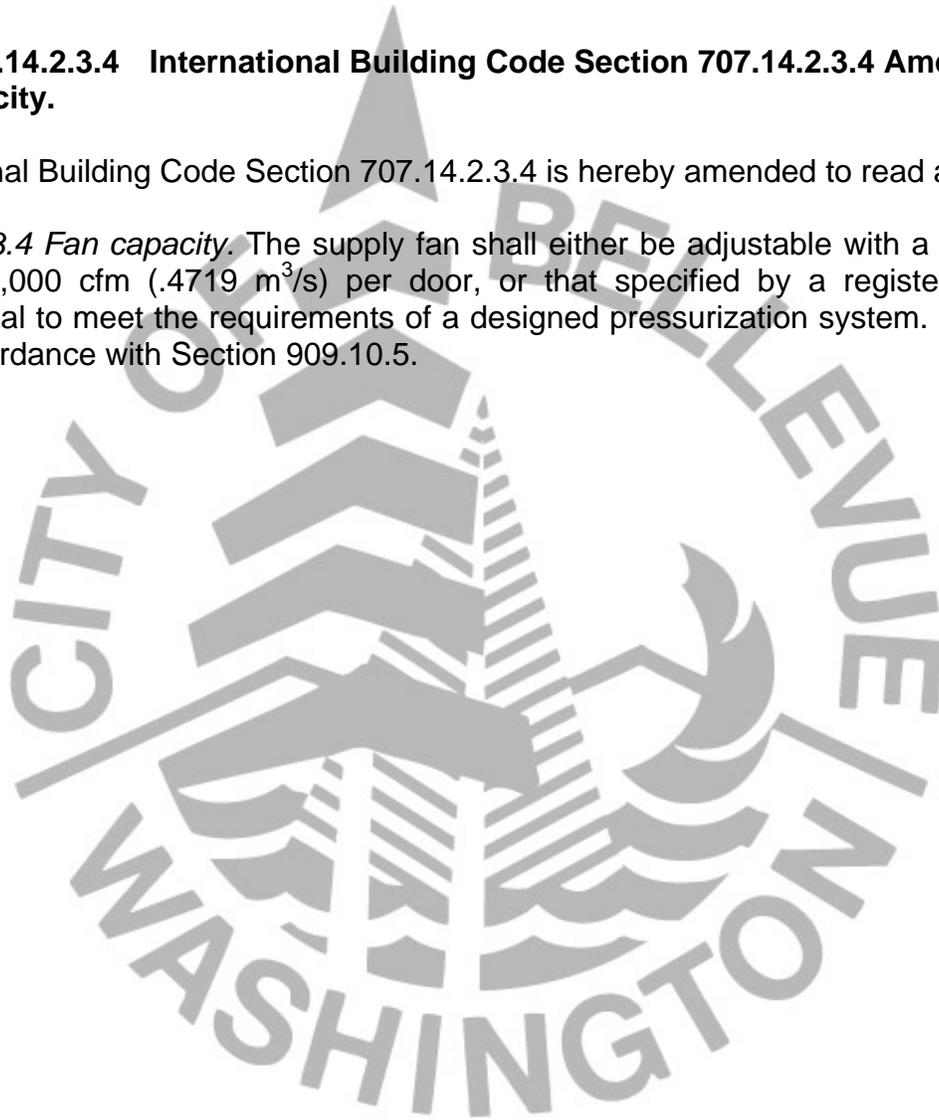
International Building Code Section 707.14.2.2 is hereby amended to read as follows:

*707.14.2.2 Ducts for system.* Any duct system that is part of the pressurization system shall be protected with the same fire-resistance rating as required for the elevator shaft enclosure in accordance with IBC Section 909.20.6.1. Ducts shall be in accordance with Section 909.10.1.

**23.10.707.14.2.3.4 International Building Code Section 707.14.2.3.4 Amended – Fan capacity.**

International Building Code Section 707.14.2.3.4 is hereby amended to read as follows:

*707.14.2.3.4 Fan capacity.* The supply fan shall either be adjustable with a capacity of at least 1,000 cfm (.4719 m<sup>3</sup>/s) per door, or that specified by a registered design professional to meet the requirements of a designed pressurization system. Fans shall be in accordance with Section 909.10.5.



**23.10.806.1 International Building Code Section 806.1 Amended – General requirements.**

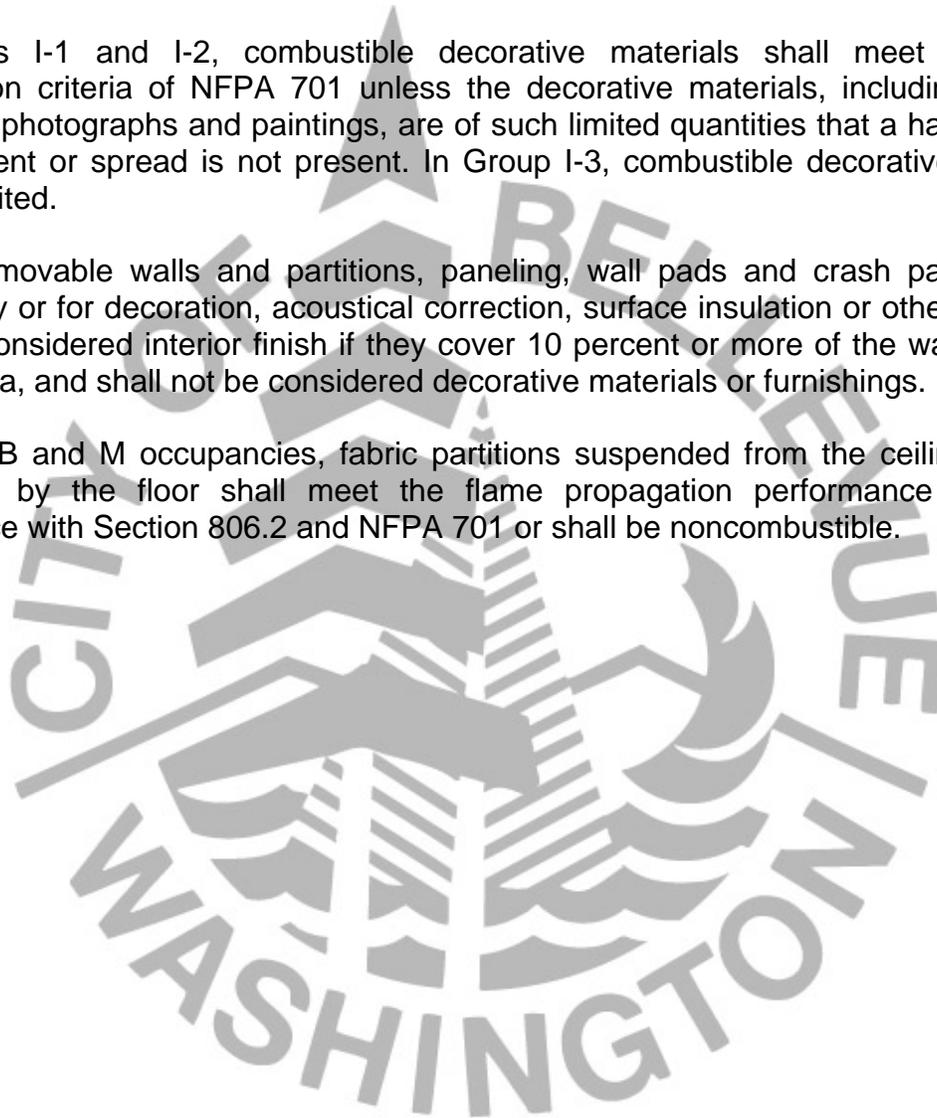
International Building Code Section 806.1 is hereby amended to read as follows:

*806.1 General requirements.* In occupancies in Groups A, B, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

In Groups I-1 and I-2, combustible decorative materials shall meet the flame propagation criteria of NFPA 701 unless the decorative materials, including, but not limited to, photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorative materials are prohibited.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

In Group B and M occupancies, fabric partitions suspended from the ceiling and not supported by the floor shall meet the flame propagation performance criteria in accordance with Section 806.2 and NFPA 701 or shall be noncombustible.



**23.10.903.2 International Building Code Section 903.2 Amended – Where required.**

International Building Code Section 903.2 is hereby amended to read as follows:

*903.2 Where required.* Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section.



**23.10.903.2.10 International Building Code Section 903.2.10 Amended – Automatic fire extinguishing systems.**

International Building Code Section 903.2.10 is hereby amended to read as follows:

*903.2.10 – Automatic fire Extinguishing systems.* An automatic sprinkler system shall be installed in the locations set forth in Sections 903.2.10.1 through 903.2.10.4.

*Exception:* Group R-3 and Group U.

*903.2.10.1 Stories and basements without openings.* An automatic sprinkler system shall be installed in every story or basement of all buildings where the floor area exceeds 1,500 square feet (139.4 m<sup>2</sup>) and where there is not provided at least one of the following types of exterior wall openings:

1. Openings below grade that lead directly to ground level by an exterior stairway complying with Section 1009 or an outside ramp complying with Section 1010. Openings shall be located in each 50 linear feet (15,240 mm), or fraction thereof, of exterior wall in the story on at least one side.



2. Openings entirely above the adjoining ground level totaling at least 20 square feet (1.86 m<sup>2</sup>) in each 50 linear feet (15,240 mm), or fraction thereof, of exterior wall in the story on at least one side.

*903.2.10.1.1 Opening dimensions and access.* Openings shall have a minimum dimension of not less than 30 inches (762 mm). Such openings shall be accessible to the fire department from the exterior and shall not be obstructed in a manner that fire fighting or rescue cannot be accomplished from the exterior.

*903.2.10.1.2 Openings on one side only.* Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22,860 mm) from such openings, the story shall be equipped throughout with an approved automatic sprinkler system or openings as specified above shall be provided on at least two sides of the story.

*903.2.10.1.3 Basements.* Where any portion of a basement is located more than 75 feet (22,860 mm) from openings required by Section 903.2.10.1, the basement shall be equipped throughout with an approved automatic sprinkler system.

*903.2.10.2 Rubbish and linen chutes.* An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Chute sprinklers shall be accessible for servicing.

*903.2.10.3 Buildings of four or more stories in height.* An automatic sprinkler system shall be installed throughout buildings four or more stories in height.

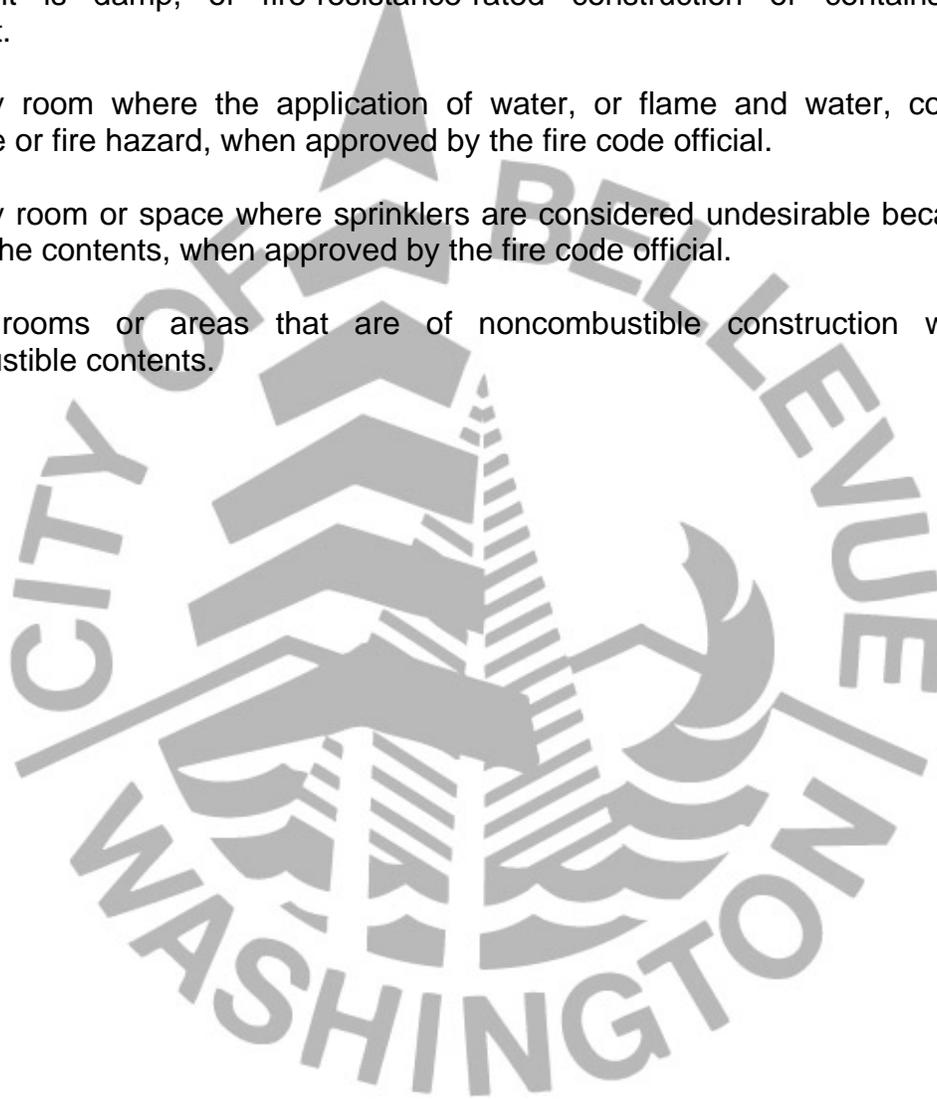
*903.2.10.4 Buildings exceeding 10,000 square feet.* Notwithstanding any provision of the International Building Code or International Fire Code, as such codes are adopted by the City, throughout all buildings where the total floor area, including basements, exceeds 10,000 square feet. For purposes of this paragraph, portions of buildings separated by one or more fire walls will not be considered a separate building. Existing buildings shall comply with this section when an addition is made to the building and the total floor area, including the basements, or the existing building and the addition combined exceeds 10,000 square feet, or when the value of a structural alteration or repair of an existing building 10,000 square feet in area or greater exceeds 50 percent of the assessed valuation of such existing building, or exceeds 50 percent of the recognized replacement cost of the structure, without consideration of depreciation, as determined under the Marshall Valuation Service Cost Handbook, whichever is greater.

**23.10.903.3.1.1.1 International Building Code Section 903.3.1.1.1 Amended – Exempt locations.**

International Building Code Section 903.1.1.1 is hereby amended to read as follows:

*903.3.1.1.1 Exempt locations.* Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system, in accordance with Section 907.2, that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard, when approved by the fire code official.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.



(Insert facing page 176B)

**23.10.903.3.1.1.2 International Building Code Section 903.3.1.1.2 Amended - High Rise Building Sprinkler System Design.**

International Building Code Section 903.3.1.1 is hereby amended by the addition of a new subsection 903.3.1.1.2 to read as follows:

*903.3.1.1.2 High Rise Building Sprinkler System Design.* Combination standpipe/sprinkler risers using 6 in. pipe minimum, shall be used with the sprinkler system connected between standpipe risers. Shut-off valves and water-flow devices shall be provided on each floor at the sprinkler system connection to each standpipe. Two four-way fire department connections serving the combination system shall be provided on separate streets well separated from each other. At least one of the fire department connections shall be connected to the riser above a riser isolation valve. Dry pipe sprinkler systems serving parking garages may use one separate two-way fire department connection. The dry pipe sprinkler system shall be supplied by the on-site water tank.

**23.10.903.3.1.4 International Building Code Section 903.3.1.4 Added – Fire Pump Boosted System Design.**

International Building Code Section 903.3.1 is hereby amended by the addition of a new subsection 903.3.1.4 to read as follows:

*903.3.1.4 Fire Pump Boosted System Design.* Sprinkler system designs utilizing a fire pump are limited to a maximum pressure loss of 0.7 psi/ft, where the city supply alone can not meet 110% of the design pressure at 100% of the design flow; unless otherwise approved by the fire code official.

**23.10.903.3.3 International Building Code Section 903.3.3 Amended – Obstructed locations.**

International Building Code Section 903.3.3 is hereby amended to read as follows:

*903.3.3 Obstructed locations.* Automatic sprinklers shall be installed in accordance with NFPA 13 obstruction criteria and the listing requirements of the sprinkler head. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands, or equipment that exceeds 4 feet (1219 mm) in width and depth, and for all multi-level exhibit booths. Not less than a 3-foot (914 mm) clearance shall be maintained between automatic sprinklers and the top of piles of combustible fibers.

*Exception:* Kitchen equipment under exhaust hoods protected with a fire-extinguishing system in accordance with Section 904.

**23.10.903.4.2 International Building Code Section 903.4.2 Amended – Alarms.**

International Building Code Section 903.4.2 is hereby amended to read as follows:

*903.4.2 Alarms.* Approved audible and visible alarm notification appliances shall be provided for every new or substantially altered automatic sprinkler system in accordance with Section 907 and throughout areas designated by the fire code official. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

*Exception:* With approval of the fire code official, audible and visible alarm notification appliances may be omitted for approved residential sprinkler systems in 1 or 2 dwelling units if not otherwise specifically required.

**23.10.903.4.3 International Building Code Section 903.4.3 Amended – Floor control valves.**

International Building Code Section 903.4.3 is hereby amended to read as follows:

*903.4.3 Floor control valves.* Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor. The floor control valves shall be located within 6' of floors or landings unless chains or other approved devices are readily available.

*Exception:* When approved by the fire code official in NFPA 13D and NFPA 13R systems.

**23.10.903.5.2 International Building Code Section 903.3.5.2 Amended - Secondary Water Source.**

International Building Code Section 903.3.5.2 is hereby amended to read as follows:

*903.3.5.2 Secondary water source.* A secondary on-site water source shall be provided for high-rise buildings as follows:

1. High-rise buildings containing R-2 or B occupancy only shall be provided with a net useable volume of 15,000 gallons.
2. High-rise buildings containing an S-2 occupancy shall be provided with a net useable volume of 40,000 gallons.
3. High-rise buildings containing an M occupancy shall be provided with a net useable volume of 50,000 gallons.

## Bellevue Building Code Amendments

4. Multi high-rise complexes sharing a common secondary water source shall be provided with a net useable volume calculated by combining the highest demand of number 2 or 3 above, with number 1 above. Only one parking/retail area and 2 high-rise buildings may share a common secondary water source.

An acceptable alternative to items 1 through 4 above, is to provide a calculated net useable volume capable of meeting the hydraulically calculated sprinkler demand, including the total (combined inside and outside) hose stream requirement, as per NFPA 13. The duration of this calculated source shall have a duration of not less than 30 minutes for buildings with light hazard occupancies only and a 60 minute duration for buildings with ordinary hazard occupancies as defined by NFPA 13.

*Exception:* Existing buildings, including those undergoing substantial renovation.



(Insert facing page 178B)

**23.10.905.3 International Building Code Section 905.3 Amended to add new subsection 905.3.8 – High-rise building standpipes.**

International Building Code Section 905.3 is hereby amended to add a new section 905.3.8 as follows:

*905.3.8 High Rise Building Standpipes.* Standpipe risers shall be combination standpipe/sprinkler risers using a minimum pipe size of 6 in. One 2-1/2 inch hose connection shall be provided on every intermediate floor level landing in every required stairway and elsewhere as required by NFPA 14. Where, and only where, static or residual water pressures at any hose outlet exceeds 175 psi (1207 kPa), approved pressure-regulating devices shall be installed to limit the pressure to 175 psi (1207 kPa). Such devices shall be adjusted to provide 175 psi (1207 kPa), or as close to that pressure as the adjustment will permit while flowing 300 gpm, without exceeding 200 psi (1207 kPa). The pressure on the inlet side of the pressure-regulating device shall not exceed the rated working pressure of the device. An equally sized bypass around the pressure regulating device with a normally closed control valve shall be provided. Signage in accordance with NFPA 14 and Section 912.4 shall be provided.



(Insert facing page 180)

**23.10.905.4 International Building Code Section 905.4 Amended – Location of Class I standpipe hose connections.**

International Building Code Section 905.4 is hereby amended to read as follows:

*905.4 Location of Class I standpipe hose connections.* Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, Where stairs are required to provide roof access, the standpipe roof connections shall be located adjacent to the stair opening on the roof.
2. On each side of the wall adjacent to the exit opening of a horizontal exit.

*Exception:* Where floor areas adjacent to a horizontal exit are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway at the entrance from the exit passageway to other areas of a building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall and at each intermediate landing within required enclosed stairways unless otherwise approved by the fire code official.
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), at least one standpipe shall be provided with a 2-½ in. hose connection located on the roof at least 10 feet (3048 mm) from the roof edge, skylight, light well and all other similar roof openings, unless otherwise approved by the fire code official. All roof hose connections shall be arranged to be operable without entering the building. Roof connections in high-rise buildings are allowed to be located at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.
6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) of hose travel distance from a hose connection, or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) of hose travel distance from a hose connection additional hose connections shall be provided in vertical exit enclosures or protected locations that are accessed through protected enclosures. The protected enclosure shall be a corridor constructed as a smoke barrier from the exit enclosure to the standpipe connection.

(Insert facing page 181A)

## Bellevue Building Code Amendments

*Exception:* Hose connections in parking garages must be located in vertical exit enclosures, protected locations, immediately adjacent to exterior exit doors, loading docks or other areas as approved by the fire code official. Subject to the approval of the fire code official, the travel distance may also be increased to a maximum distance of 240 feet.

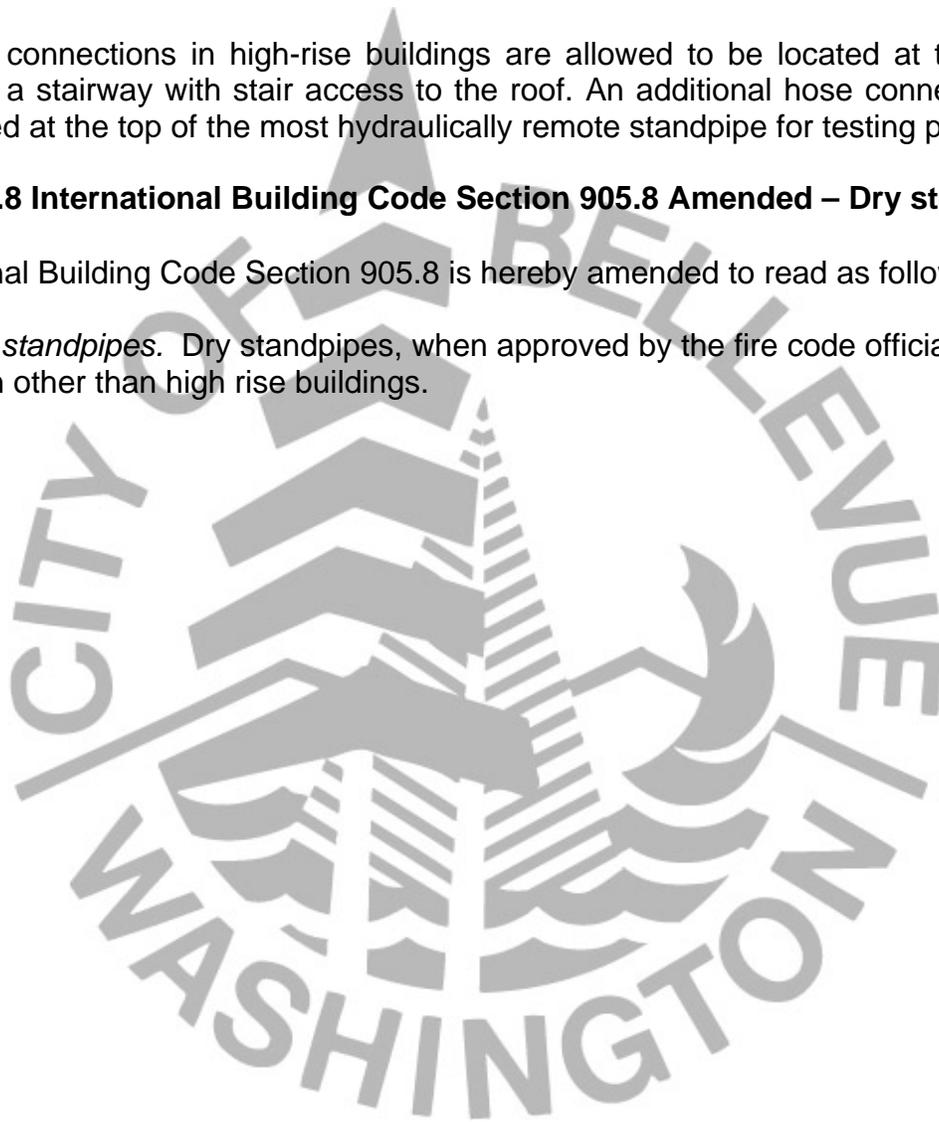
7. Additional roof connections shall be provided so that all portions of the roof are within 200 feet (60 960 mm). of hose travel distance from a standpipe hose connection. Roof hose connections shall be arranged to be operable without entering the building.

8. Roof connections in high-rise buildings are allowed to be located at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.

### **23.10.905.8 International Building Code Section 905.8 Amended – Dry standpipes.**

International Building Code Section 905.8 is hereby amended to read as follows:

*905.8 Dry standpipes.* Dry standpipes, when approved by the fire code official, may be installed in other than high rise buildings.



(Insert facing page 181B)

Effective 7/07

**23.10.907.1 International Building Code Section 907.1 Amended – General**

International Building Code Section 907.1 is hereby amended to read as follows:

*907.1 General.* This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures and new fire alarm systems including replacement of existing fire alarm control panels being installed in existing structures. The requirements of Section 907.3 are applicable to existing buildings and structures. Buildings required by this section to be provided with a fire alarm system shall be provided with a single fire alarm system unless otherwise approved by the fire code official. For the purposes of this section, fire walls shall not be considered to create separate buildings.



**23.10.907.2.7.1 International Building Code Section 907.2.7.1 Not Adopted - Occupant notification.**

International Building Code Section 907.2.7.1 is not as part of the 2006 uniform code updates.



**23.10.907.2.12.1 International Building Code Section 907.2.12.1 Amended – Automatic fire detection.**

International Building Code Section 907.2.12.1 is hereby amended to read as follows:

*907.2.12.1 Automatic fire detection.* Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section, other than duct smoke detectors, shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

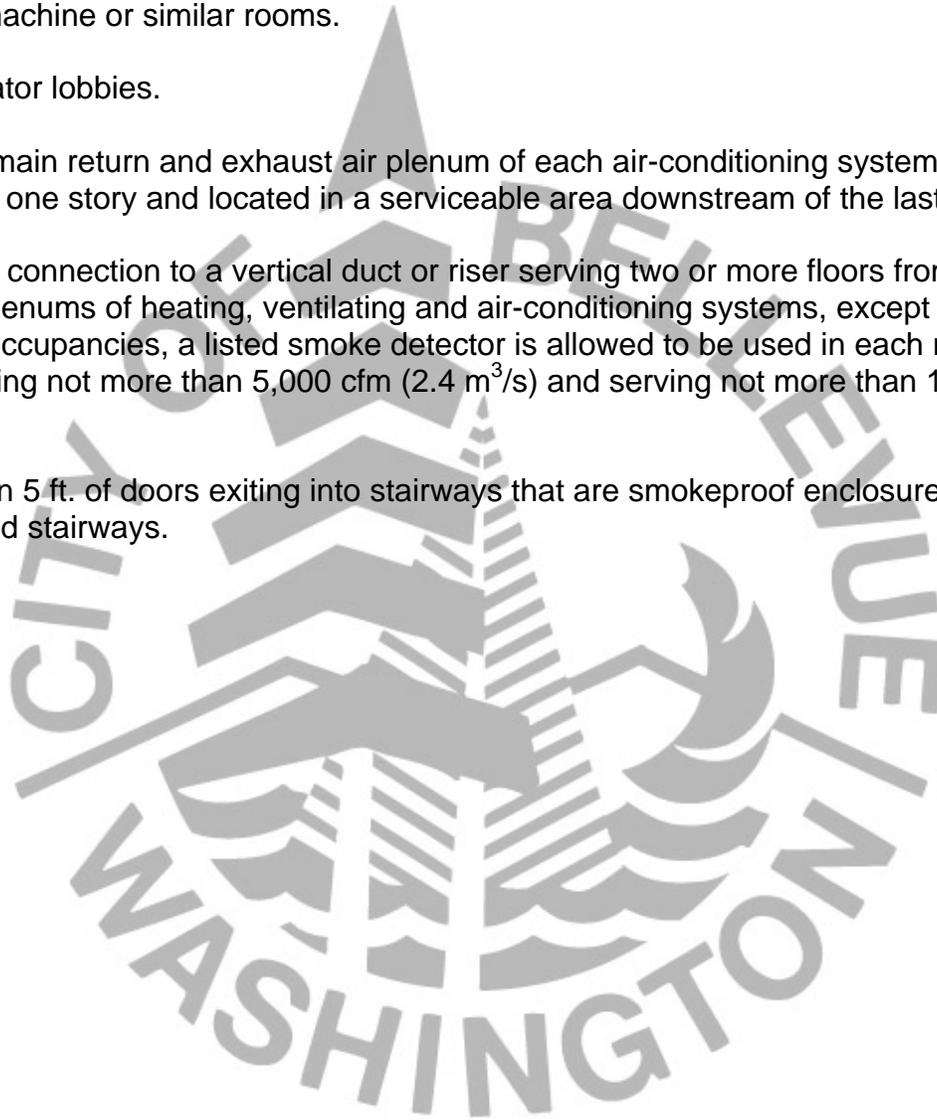
1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms and in elevator lobbies.
2. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m<sup>3</sup>/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
3. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m<sup>3</sup>/s) and serving not more than 10 air inlet openings.
4. Within 5 feet (1524 mm) of doors exiting into stairways that are smoke proof enclosures, or are pressurized stairways.

**23.10.907.2.18.1 International Building Code Section 907.2.18.1 Amended – Smoke Detectors.**

International Building Code Section 907.2.18.1 is hereby amended to read as follows:

*907.2.18.1 Smoke detectors.* A minimum of one smoke detector listed for the intended purpose shall be installed in the following areas:

1. Electrical, non-Utility-owned transformer vault rooms, telephone equipment, elevator machine or similar rooms.
2. Elevator lobbies.
3. The main return and exhaust air plenum of each air-conditioning system serving more than one story and located in a serviceable area downstream of the last duct inlet.
4. Each connection to a vertical duct or riser serving two or more floors from return air ducts or plenums of heating, ventilating and air-conditioning systems, except that in Group R occupancies, a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m<sup>3</sup>/s) and serving not more than 10 air inlet openings.
5. Within 5 ft. of doors exiting into stairways that are smokeproof enclosures, or are pressurized stairways.



**23.10.907.6 International Building Code Section 907.6 Amended – Activation.**

International Building Code Section 907.6 is hereby amended to read as follows:

*907.6 Activation.* Where an alarm notification system is required by another section of this code, it shall be activated by:

1. Automatic-heat and smoke detectors, other than duct smoke detectors, and dwelling unit smoke alarms.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Any other fire suppression system installed within the building.

**23.10.907.8.1 International Building Code Section 907.8.1 Amended – Annunciator Panel.**

International Building Code Section 907.8.1 is hereby amended to read as follows:

*907.8.1 Annunciator Panel.* All fire alarm systems shall include either an annunciator or the main control panel located inside the building at the main building entrance. The fire code official may approve exterior annunciator panels designed specifically for the that purpose. Graphic annunciators, when provided, shall be mounted to maintain the viewer's directional orientation. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible-alarm silencing switch.

Alarm panels and annunciators shall not be installed where they would obstruct exiting. The required exit width plus 12 inches shall be provided when the panel is located in a means of egress. Alarm panels shall not be installed in an exit enclosure providing the sole exit from any space.

**23.10.909.1 International Building Code Section 909.1 Amended – Scope and purpose.**

International Building Code Section 909.1 is hereby amended as follows:

*909.1 Scope and purpose.* This section applies to mechanical or passive smoke control systems when they are required by other provisions of this code, including Section 707.14.2.1. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations, or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat-venting provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the International Mechanical Code.



(Insert facing page 190)

**23.10.909.4.6 International Building Code Section 909.4.6 amended – Duration of operation.**

International Building Code Section 909.4.6 is hereby amended to read as follows:

*909.4.6 Duration of operation.* All portions of active or passive smoke control systems shall be capable of continued operation after detection of the fire event for a period of not less than either 20 minutes or 1.5 times the calculated egress time, whichever is less, except that the emergency generator shall have fuel capacity for no less than a 2-hour run time.



**23.10.909.10.3 International Building Code Section 909.10.3 Amended – Equipment, inlets and outlets.**

International Building Code Section 909.10.3 is hereby amended as follows:

*909.10.3 Equipment, inlets and outlets.* Equipment shall be located so as to not expose uninvolved portions of the building to an additional fire hazard. Outside air inlets shall be located a minimum distance of 20 feet from any air exhaust system or outlet so as to minimize the potential for introducing smoke or flame into the building. Exhaust outlets shall be so located as to minimize reintroduction of smoke into the building and to limit exposure of the building or adjacent buildings to an additional fire hazard.

**23.10.909.11 International Building Code Section 909.11 Amended – Power systems.**

International Building Code Section 909.11 is hereby amended as follows:

*909.11 Power systems.* The smoke control system shall be supplied with two sources of power. Primary power shall be from the normal building power system. Secondary power shall be from an approved standby source complying with NFPA 70 (National Electrical Code). The standby power source and its transfer switches shall be in a separate room from the normal power transformers and switch gear and shall be enclosed in a room constructed of not less than 1-hour fire barriers, except 2-hour for high rise and underground buildings per Sections 403 and 405 respectively, ventilated directly to and from the exterior. Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with this code and NFPA 70 (National Electrical Code).

**23.10.909.20 International Building Code Section 909.20 Amended – Smokeproof enclosures.**

International Building Code Section 909.20 is hereby amended as follows:

*909.20 Smokeproof enclosures.* Where required by Section 1019.1.8, a smokeproof enclosure shall be constructed in accordance with this section. All portions of the smokeproof enclosure ventilation system and equipment must comply with the provisions of Section 909. A smokeproof enclosure shall consist of an enclosed interior exit stairway that conforms to Section 1019.1 and an outside balcony or ventilated vestibule meeting the requirements of this section. Where access to the roof is required by the *International Fire Code*, such access shall be from the smokeproof enclosure where a smokeproof enclosure is required.



**23.10.909.20.5 International Building Code Section 909.20.5 Amended – Stair pressurization alternative.**

International Building Code Section 909.20.5 is hereby amended as follows:

*909.20.5 Stair pressurization alternative.* Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the vestibule is not required, provided that interior exit stairways are pressurized to a minimum of 0.15 inch of water (37 Pa) and a maximum of 0.35 inch of water (87 Pa) in the shaft relative to the building measured with all stairway doors closed under maximum anticipated stack pressures. The pressure difference across doors shall not exceed 30 lbs (133-N) maximum force to begin opening the door.



**23.10.909.20.6.1 International Building Code Section 909.20.6.1 Amended – Ventilation systems.**

International Building Code Section 909.20.6.1 is hereby amended as follows:

*909.20.6.1 Ventilation systems.* Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork or shafts enclosed by 2-hour fire barriers.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork or shafts enclosed by 2-hour fire barriers; or
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical and electrical equipment, by 2-hour fire barriers.

*Exception:* Control wiring and power wiring utilizing a 2-hour rated cable or cable system.

**23.10.909.20.6.3 International Building Code Section 909.20.6.3 Amended – Acceptance and testing.**

International Building Code Section 909.20.6.1 is hereby amended as follows:

*909.20.6.3 Acceptance and testing.* Special inspection for performance shall be required in accordance with Section 909.18.8.

**23.10.912.4 International Building Code Section 912.4 Amended – Signs.**

International Building Code Section 912.4 is hereby amended as follows:

*912.4 Signs.* A metal sign with raised letters at least 1 inch (25mm) in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: SPRINKLERS, STANDPIPES, COMBINED, DRY S/PIPES, DRY S/P & SPKRS, or BOOST TO (as specified by the fire code official) PSI, or TEST CONNECTION or a combination thereof as applicable. Systems utilizing Pressure Reducing Valves (PRV's) must note the required boosted pressure at the Fire Department Connection, in order to overcome the PRV setting.



**23.10.1006.3 International Building Code Section 1006.3 Amended – Illumination emergency power.**

International Building Code Section 1006.3 is hereby amended as follows:

*1006.3 Illumination emergency power.* The power supply for means of egress illumination shall normally be provided by the premises' electrical supply.

In the event of power supply failure, an emergency electrical system shall automatically illuminate the following areas:

1. Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.
2. Corridors, exit enclosures and exit passageways in buildings required to have two or more exits.
3. Exterior egress components at other than the level of exit discharge until exit discharge is accomplished for buildings required to have two or more exits.
4. Interior exit discharge elements, as permitted in Section 1024.1, in buildings required to have two or more exits.
5. Exterior landings, as required by Section 1008.1.5, for exit discharge doorways in buildings required to have two or more exits.

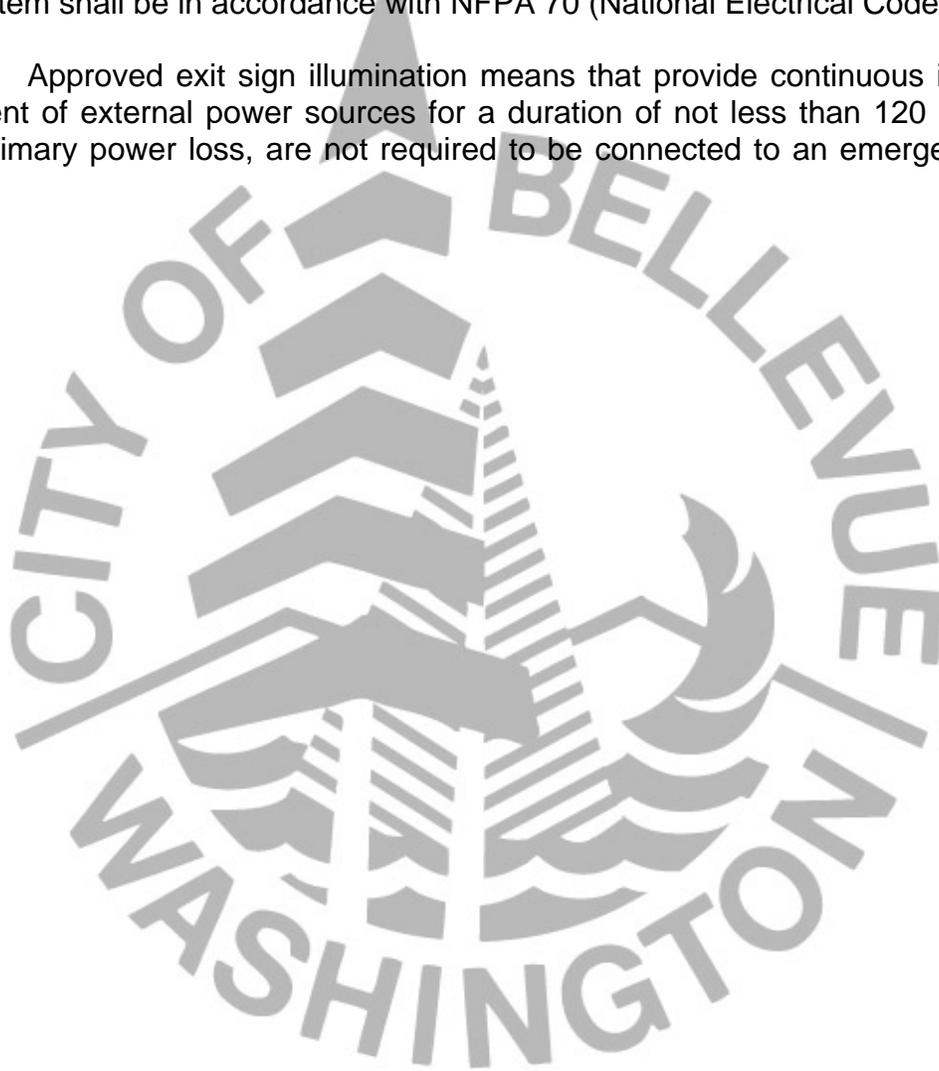
The emergency power system shall provide power for a duration of not less than 90 minutes or such time as stipulated by Table 403(1) when applicable, and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with NFPA 70 (National Electrical Code)-

**23.10.1011.5.3 International Building Code Section 1011.5.3 Amended – Power source.**

International Building Code Section 1011.5.3 is hereby amended as follows:

*1011.5.3 Power source.* Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes or such time as stipulated by Table 403(1) when applicable, in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with NFPA 70 (National Electrical Code)-

*Exception:* Approved exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 120 minutes, in case of primary power loss, are not required to be connected to an emergency power system.



**23.10.1608.1 International Building Code Section 1608.1 Amended -- General.**

*1608.1 General.* Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but shall not be less that determined by Section 1607.



**23.10.1613.1 International Building Code Section 1613.1 Amended – Scope.**

International Building Code Section 1613.1 is hereby amended to read as follows:

*1613.1 Scope.* Every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, shall be designed and constructed to resist the effects of earthquake motions in accordance with ASCE 7, excluding Chapter 14 and Appendix 11A. The seismic design category for a structure is permitted to be determined in accordance with Section 1613 or ASCE 7.

*Exceptions:*

1. Detached one- and two-family dwellings, assigned to Seismic Design Category A, B, or C, or located where the mapped short-period spectral response acceleration,  $S_s$ , is less than 0.4 g.
2. The seismic-force-resisting system of wood-frame buildings that conform to the provisions of Section 2308 are not required to be analyzed as specified in this section.
3. Agricultural storage structures intended only for incidental human occupancy.
4. Structures that require special consideration of their response characteristics and environment that are not addressed by this code or ASCE 7 and for which the regulations provide seismic criteria, such as vehicular bridges, electrical transmission towers, hydraulic structures, buried utility lines and their appurtenances and nuclear reactors.
5. Earthquake protection for automatic sprinkler systems when hanging, bracing, and restraint is designed and installed in accordance with the 2007 edition of NFPA 13.

**23.10.1704.1 International Building Code Section 1704.1 Amended – General.**

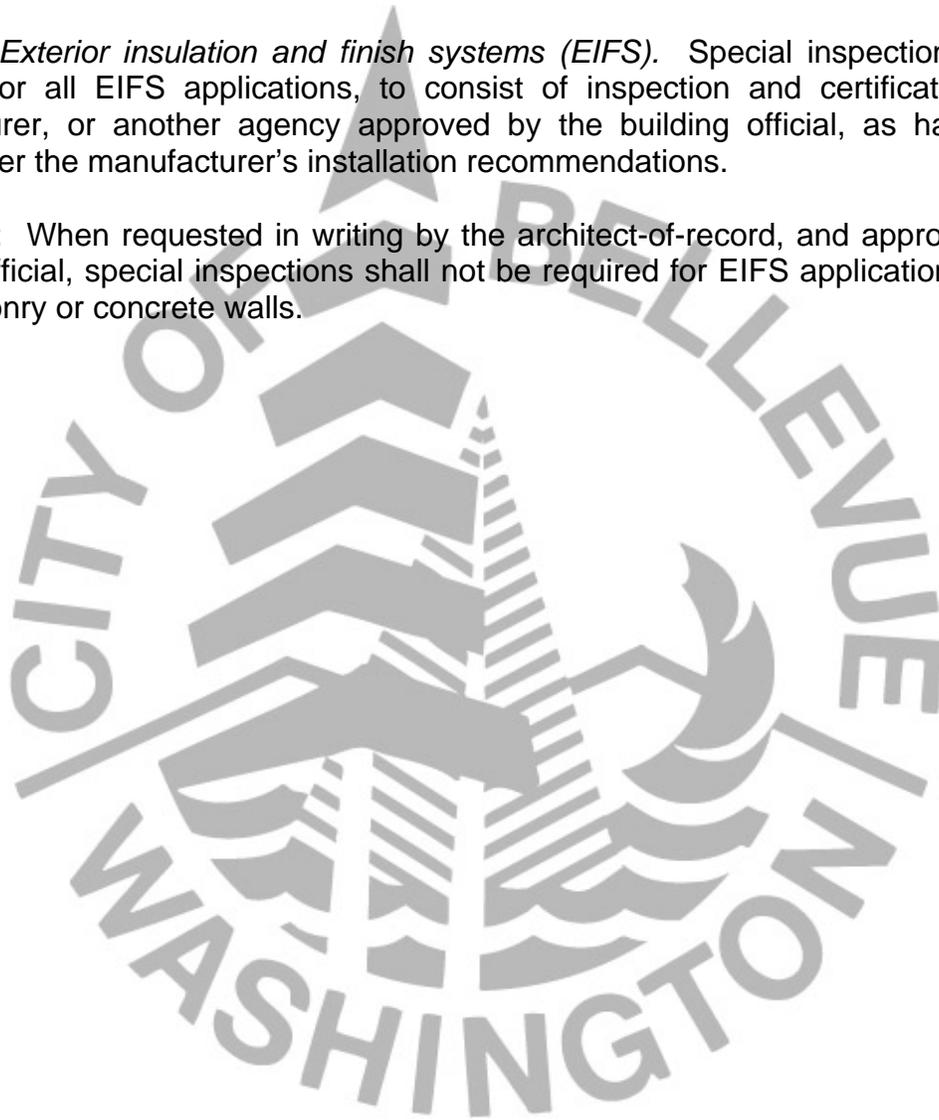
International Building Code Section 1704.1 is hereby amended by deleting exception 3 in its entirety.

**23.10.1704.12 International Building Code Section 1704.12 Amended -- Exterior insulation and finish systems (EIFS).**

International Building Code Section 1704.12 is hereby amended to read as follows:

*1704.12 Exterior insulation and finish systems (EIFS).* Special inspections shall be required for all EIFS applications, to consist of inspection and certification by the manufacturer, or another agency approved by the building official, as having been installed per the manufacturer's installation recommendations.

Exception: When requested in writing by the architect-of-record, and approved by the building official, special inspections shall not be required for EIFS applications installed over masonry or concrete walls.



(Insert facing page 328)

**23.10.3002.4 International Building Code Section 3002.4 Amended – Elevator car to accommodate ambulance stretcher.**

International Building Code Section 3002.4 is hereby amended to read as follows:

*3002.4 Elevator car to accommodate ambulance stretcher.* Where elevators are provided in buildings four or more stories above grade plane; or four or more stories below grade plane; or in any R or I occupancy building provided with an elevator regardless of the number of stories; at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 1930 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.



(Insert facing page 525)

**23.10.3304.1 International Building Code Section 3304.1 Amended – Excavation and fill.**

International Building Code Section 3304.1 is hereby amended to include the following new subsections:

*3304.1.5. Excavation and Shoring Near Improved Public Places.* No person, firm or corporation shall excavate and/or install shoring in excess of four feet, measured vertically, on private property within any area between the vertical prolongation of the margin of an improved public place and a 100 percent slope line (45 from a horizontal line) from the existing elevation of the margin of the traveled surface of an improved public place to the proposed elevation of the private property (See plate No. 1) without first obtaining a permit from the building official to do so, and no work shall commence toward such excavation and shoring until a permit therefore has been issued by the building official. Improved public place means any street, alley, easement for water, sewer or storm drainage, or similar parcel of land which is deeded, dedicated or otherwise permanently made available to the City or public for city or public use.

The permit required hereunder is in addition to any permits required under Chapter 23.76 BCC. No person, firm or corporation shall leave any excavation for which a permit is required within four feet of any public place, or in such other place as the building official determines to be hazardous, without providing adequate barricades and warning devices to protect the public, or shall fail to maintain the lateral support of any public place.

*3304.1.6. Assignment of Savings on Applications for Permits.* If the building official determines that there is a possibility of injury, damage or expense to the City arising from an applicant's work or proposed use of any public place, the applicant shall execute and file an assignment of savings. The amount of the assignment of savings shall be determined by the building official at the time of approving the application based on the estimated amount and extent of the potential injury, damage, or expense to the City. The applicant shall file the same with the building official before receiving a permit. The City may use such assignment of savings to pay for any injury, damage or expense the City may sustain in conjunction with the permitted work. The balance of the assignment of savings, if any after such deductions, shall be returned to the applicant. If the assignment of savings is insufficient, the applicants will be liable for the deficiency. Upon notice to the applicant, the building official may at any time increase or reduce the amount required deposit or waive same as conditions warrant.

*3304.1.7 Expiration.* Every permit issued by the building official under the provisions of BCC 23.10.3304.1 shall be subject to all provisions of BCC 23.05.160.

*3304.1.8 Fees.* The fee for each permit shall be as set forth in the fee ordinance, as now or hereafter amended.

## Bellevue Building Code Amendments

*3304.1.9 Compliance.* All solder piles and other materials used for shoring purposes shall be removed from public places and adjacent property as part of and prior to completion of the construction project in accordance with the plans approved by the building official or as modified with his approval, unless the permit provides otherwise.



(Insert facing page 537B)

Effective 7/07

**23.16.010 Barrier Requirements – Specifications.**

The following requirements shall apply to all outdoor swimming pools, spas and hot tubs heretofore or hereafter constructed or presently under construction within the city. Each such pool, spa, or hot tub shall be enclosed with a pool or yard fence, designed per the International Building Code Section 3109 or the International Residential Code AG105 adopted pursuant to Chapter 23.10 BCC, whichever shall apply to the primary use and structure with which the pool, spa, or hot tub is associated.

Exceptions:

- A. Where access to the pool is subject to regulations for barrier-free facilities, provision for access to the pool shall be designed to comply with the barrier-free regulations.
- B. Upon approval of the building official, a fence and gate may be replaced with a locking cover to assure supervised use of the spa or hot tub.
- C. Any outdoor swimming pool, spa or hot tub which was constructed prior to adoption of the International Building Code or the International Residential Code under Chapter 23.10 BCC under this chapter need not comply with the terms of this section if such swimming pool, hot tub or spa is enclosed with pool or yard fence which complies with the city code provision regarding enclosures which was in effect at the time the enclosure was constructed.

