

## Chapter 4-16

### SPECIAL DESIGN STANDARDS FOR TYPE V CONSTRUCTION

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#### Section 4-16-01 PURPOSE

The purpose of this Chapter is to provide certain minimum standards and requirements to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, use, occupancy and location of mixed-use, high density housing located in the downtown core within the Boise City Fire Department's Response Zone.

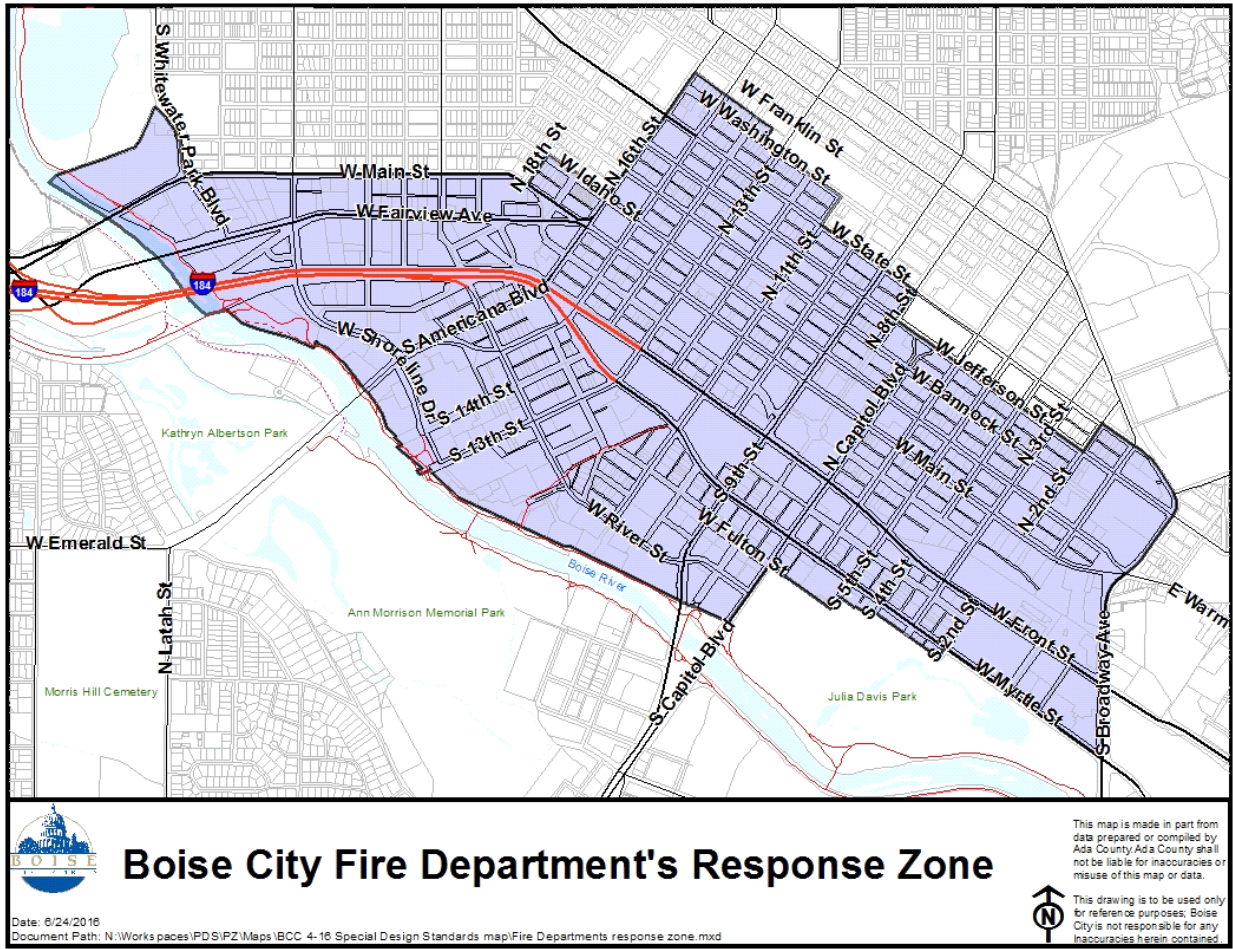
The provisions of this chapter may be used to design and construct five story, Type VA, mixed-use, high density housing over a Type IA podium style building. Buildings designed and constructed under this chapter shall comply with all provisions of this chapter and other codes and ordinances as adopted by the City of Boise. The provisions of this chapter provide an equivalent level of protection to the standards set forth in the International Building Code as adopted by the City of Boise. The building official and fire code official are hereby authorized and directed to enforce the provisions of this ordinance including rendering interpretations to clarify intent and purpose. Any appeals of decisions or determinations made by the code officials may be made to the Board of Appeals created under the International Building Code amendments in the Boise City Building Code of Boise Municipal Code.

(Ord-21-2016, Amended, 07/19/2016; 6704, Amended, 02/17/2009; Added, 08/24/2004)

#### Section 4-16-02 APPLICABLE AREA

The requirements of this ordinance shall be applicable to new structures, constructed after the effective date of adoption, located in the downtown core within the Boise City Fire Department's Response Zone as illustrated in attachment 4-A. Design and construction of the new structures covered by this ordinance shall also comply with the International Building Code as adopted in Boise City Code, Title 4, Chapter 2. and other applicable codes adopted by Boise City. Where a provision in this chapter is in conflict with Boise City Code, Title 4-02, Title 7, or other adopted codes, the provisions of this chapter shall apply.

**ATTACHMENT 4-A BOISE CITY FIRE DEPARTMENT'S RESPONSE ZONE**



(Ord-26-15, Repealed and Replaced, 7/5/15; 6704, Amended, 02/17/2009; 6339, Added, 08/24/2004)

**Section 4-16-03 CONSTRUCTION AND OCCUPANCY**

A. **Single Construction.** Single construction buildings complying with this Chapter may be a maximum of five stories of Type VA construction when all of the following conditions are met:

- 1) The below grade building is constructed of Type IA construction and is separated from the Type VA construction above grade upper building with a horizontal assembly having a minimum 3-hour fire resistance rating. Openings in the horizontal assembly are to be protected in accordance with the provisions in Section 4-16-03, B-1; and
- 2) The below grade building contains only Group S-2 occupancy, enclosed parking garage, used exclusively for the parking and storage of private motor vehicles, and the above grade upper building contains only Group R-2 occupancy; and

**Exceptions:**

- a) An exterior assembly area that serves the residential use with a total occupant load less than 300 when located on the floor at grade directly above the 3-hour horizontal assembly of the below grade building.
  - b) The above grade upper building may include B occupancy rooms or B occupancy assembly use areas that are accessory to the residential use of not more than 10% of each floor area provided the total occupant load of the sum of all B occupancy areas on each floor is less than 50. An occupied roof is considered a floor level but not a story.
  - c) Entry lobbies, mechanical rooms, waste and recycling collection, bicycle storage and similar uses incidental to the operation of the building shall be permitted in the below grade building and in the above grade upper building.
- 3) The maximum above grade upper building shall not be more than five stories nor have an overall building height exceeding 70 feet above the lowest fire apparatus access road as defined in the International Fire Code and this Ordinance; and
  - 4) The structure is located in the Boise City Fire Department's Response Zone as illustrated above in Section 4-16-02.

**B. Mixed Construction.** A structure may be divided into two separate and distinct buildings, upper and lower, for the purpose of determining area limitations, continuity of firewalls, limitation of number of stories and type of construction, when all of the following conditions are met:

- 1) The lower building is constructed of Type IA construction and is separated from the upper building with a horizontal assembly having a minimum 3-hour fire resistance rating. Openings in the horizontal assembly having a minimum 3-hour fire-resistance rating shall be protected by shaft, stairway, ramp or escalator enclosures extending above and below such openings. The walls of such enclosures shall have not less than 2-hour fire-resistance rating and openings therein shall be protected by opening protection having a minimum 1 ½ -hour fire-protection rating; and

**Exception:** Where the walls of such enclosures extending below the horizontal assembly having a minimum 3-hour fire-resistance rating to the foundation are provided with a fire-resistance rating of not less than 3 hours with openings therein protected as required for walls forming a 3-hour fire barrier, the enclosure walls extending above such floor used as the horizontal assembly having a minimum 3-hour fire-resistance rating shall be permitted to have a 1-hour fire-resistance rating provided:

- a) The upper building is not required to be of Type IA construction; and

- b) The enclosure walls do not enclose an exit stairway, elevator, ramp or an escalator required to have enclosure walls with not less than 2-hour fire-resistance rating; and
  - c) The 1-hour enclosure connects less than four stories and has opening protectives above the horizontal assembly with a fire protection rating of not less than 1-hour.
- 2) The upper building contains only Group R-2; occupancy and

**Exceptions:**

- a) An exterior assembly area that serves the residential use with a total occupant load less than 300 when located on the floor directly above the 3-hour horizontal assembly of the lower building.
  - b) The upper building may include B occupancy rooms or B occupancy assembly use areas that are accessory to the residential use of not more than 10% of each floor area provided the total occupant load of the sum of all B occupancy areas on each floor is less than 50. An occupied roof is considered a floor level but not a story.
  - c) Entry lobbies, mechanical rooms, waste and recycling collection, bicycle storage and similar uses incidental to the operation of the building shall be permitted.
- 3) The lower building contains only occupancies of Group A, B, M, R or S-2 enclosed or open parking garage, used exclusively for the parking and storage of private motor vehicles; and

**Exception:** Entry lobbies, mechanical rooms, waste and recycling collection, bicycle storage and similar uses incidental to the operation of the building shall be permitted.

- 4) The maximum upper building shall not exceed five stories in height. The finish floor level of the highest occupied level in the upper building shall not exceed 75 feet above the lowest fire apparatus access road as defined in the IFC and this Ordinance; and
- 5) The structure is located in the Boise City Fire Department's Response Zone as illustrated above in Section 4-16-02.

C. **Construction Types.** Type IA and Type VA construction shall be as specified in the International Building Code as adopted by the City of Boise.

#### **Section 4-16-04 UPPER BUILDING AREA, HEIGHT, NUMBER OF STORIES AND OTHER REQUIREMENTS**

**Upper building area, height, number of stories and other requirements.** The area, height, number of stories and other requirements listed below for the upper building with both single construction and mixed construction methods constructed under this ordinance shall comply with this section.

The upper building containing group R-2 Occupancies with accessory uses as described in Boise City Code Section 4-16-03, building area, building height, including allowance of the number of stories to be increased up to a maximum of five stories, shall comply with the following conditions:

- 1) The tabular area increases for a sprinklered building in IBC Chapter 5 are not permitted; however the tabular allowable area for a nonsprinklered building of Group R-2 occupancy of Type V-A construction may be increased by 25% per floor over the area value listed in the allowable area Table of the IBC. This area increase is calculated separately and is added in addition to any other area increases allowed for frontage increase and single occupancy, multi-story buildings in Chapter 5 of the IBC; and
- 2) The building shall be sprinklered in accordance with National Fire Protection Association (NFPA) Standard 13; and
- 3) For mixed construction, the R-2 occupancy area may be increased to 70 feet in height, provided the finished floor of the highest occupied level does not exceed 75 feet and the overall building height does not exceed 95 feet measured from the lowest fire apparatus access road to the building. For single-construction the maximum overall building height shall not exceed 70 feet in height above the lowest fire apparatus access road; and
- 4) The structure shall be located in the Boise City Fire Department's Response Zone as illustrated above in Section 4-16-02; and
- 5) The exit access travel distance specified in Chapter 10 of the IBC shall be reduced by 40% (0.40) for Group R-2 occupancy; and
- 6) Unless otherwise required to be a higher rating by the code, all exterior walls shall be constructed with a minimum of a 1-hour fire resistive wall assembly rated for exposure to fire from both sides. The exterior wall finish materials per Chapter 14 of the IBC shall be of non-combustible material as described in Chapter 7 of the IBC; and

- 7) Pressurized interior exit stairways shall be provided in accordance with the requirements of the IBC for every required exit stairway. All required exit stairways shall provide roof-access.

**Exception:** The fire code official is authorized to reduce the number of roof-access stairways or pressurized interior exit stairways to not less than two.

(Ord-21-16, Amended, 07/19/2016; 6704, Amended, 02/17/2009; 6339, Added, 08/24/2004)

#### **Section 4-16-05 COMMERCIAL KITCHEN GREASE DUCTS AND EXHAUST EQUIPMENT**

Commercial kitchen grease ducts and exhaust equipment shall comply with the requirements of the International Mechanical Code. Ducts that serve Type I hoods and penetrate a floor shall be in a shaft enclosure of not less than two-hour fire resistance rated construction.

(Ord-21-16, Amended, 07/19/2016; 6704, Amended, 02/17/2009; 6339, Added, 08/24/2004)

#### **Section 4-16-06 EARLY ASSISTANCE MEETING**

**Early Assistance Meeting.** As early as practicable in the design process, the applicant shall have an Early Assistance Meeting with Planning and Development Services, Fire Department and other applicable city departments.

(Ord-21-16, Amended, 07/19/2016; 6704, Amended, 02/17/2009; 6339, Added, 08/24/2004)

#### **Section 4-16-07 ADDITIONAL INSPECTIONS**

In addition to the required inspections and special inspections specified in the International Building Code and International Fire Code, Planning and Development Services shall require the following additional inspections for buildings constructed pursuant to this chapter:

- A. **Structural Observation.** Structural observation shall be provided by the engineer of record. Reports of the structural observation shall be provided to the City Structural Building Inspector periodically during framing.
- B. **Special Inspection.** Special inspection shall be provided for fire-resistant penetrations and joints as specified in the IBC and to enhance attention on the key elements of the lateral force resisting systems of the building, including, but not limited to, the following:
- 1) The grade of structural wood panels used in the shear walls and horizontal diaphragms; and
  - 2) The nail size and pattern of the shear walls and horizontal diaphragms; and
  - 3) The framing, location and length of all shear walls; and

- 4) The hold down installations at all shear wall locations; and
- 5) The diaphragm chord, drag strut and related details; and
- 6) The base plate bolting; and
- 7) The blocking to top plate nailing.

The special inspector shall be employed by the owner or the registered design professional in responsible charge acting as the owner's agent, and shall comply with the provisions of Chapter 17 of the International Building Code.

- C. **Continuous Inspection.** The permit holder shall coordinate an inspection schedule with the City Structural Building Inspection Division to monitor daily construction activity.
- D. **Fire Alarms and Fire Sprinklers.** Fire alarm and fire sprinkler systems shall be inspected, tested and maintained in accordance with NFPA 25 and NFPA 72 on at least a semiannual basis. Inspection reports shall be submitted to the fire code official within 30 days of completion.

(Ord-21-16, Amended, 07/19/16; 6704, Amended, 02/17/2009; 6339, Added, 08/24/2004)