

Section 2.1. General

2.1.1. Scope

2.1.1.1. Application

1) This Part provides for the safety of the occupants in existing *buildings*, the elimination or control of fire hazards in and around *buildings*, the installation and maintenance of certain life safety systems in *buildings*, the installation and maintenance of posted signs and information, and the establishing of a fire safety plan in those *occupancies* where it is considered necessary.

2.1.2. Classification of Buildings

2.1.2.1. Classification

1) For the purpose of applying this Code, every *building* or part thereof shall be classified according to its *major occupancy* in conformance with the British Columbia Building Code. (See Note A-2.1.2.1.(1).)

2.1.2.2. Hazardous Activities

1) Activities that create a hazard and that are not allowed for in the original design shall not be carried out in a *building* unless provisions are made to control the hazard in conformance with this Code. (See Note A-2.1.2.2.(1).)

2) No *major occupancy* of Group F, Division 1 shall be contained within a *building* with any *occupancy* classified as an *assembly, care, treatment, detention* or *residential occupancy*.

2.1.3. Fire Safety Installations

2.1.3.1. Fire Alarm, Standpipe and Sprinkler Systems

1) Except as otherwise provided in this Code, fire alarm, standpipe and sprinkler systems shall be provided in *buildings* when required by Article 1.1.1.1. of Division A of the British Columbia Building Code. (See Note A-2.1.3.1.(1).)

2) When changes in the use of *buildings* or *floor areas* create a hazard exceeding the criteria for which the fire protection systems were designed, such fire protection systems shall be upgraded to accommodate the increased hazard.

2.1.3.2. Voice Communication Systems

1) A voice communication system or systems integrated with the general fire alarm system shall be provided in *buildings* as specified in Subsection 3.2.6. of Division B of the BCBC.

2.1.3.3. Smoke Alarms

(See Note A-2.1.3.3.)

1) *Smoke alarms* shall be installed in each *dwelling unit* and, except for *care, treatment* or *detention occupancies* required to have a fire alarm system, in each sleeping room not within a *dwelling unit*.

2) *Smoke alarms* within *dwelling units* shall be installed between each sleeping area and the remainder of the *dwelling unit*, and where the sleeping areas are served by hallways, the *smoke alarms* shall be installed in the hallways.

3) *Smoke alarms* shall be installed in conformance with CAN/ULC-S553, “Installation of Smoke Alarms.”

4) *Smoke alarms* are permitted to be battery operated in

a) a *building* that is not supplied with electrical power, or

b) locations within a *dwelling unit* where *smoke alarms* were not required by the British Columbia Building Code at the time of construction or alteration of the *dwelling unit*.

2.1.3.4. Protection of Combustible Sprinkler Piping

1) Materials installed to protect combustible sprinkler piping, as is required by the BCBC, shall be maintained in accordance with the provisions of the same edition of the BCBC used for their installation.
(See Note A-2.1.3.4.(1).)

2.1.3.5. Special Fire Suppression Systems

1) Where a special fire suppression system is required by this Code or installed through application of good engineering practices, the system shall conform to one of the standards listed in Sentences (3) and (4).

2) If a water-based fire suppression system is not compatible with the fire suppression requirements for certain types of *dangerous goods*, a special fire suppression system conforming to one of the standards listed in Sentence (3) is permitted to be installed in lieu of a water-based system.

3) The design and installation of a special fire suppression system that is not water-based shall conform to one of the following standards:

- a) NFPA 11, “Low-, Medium-, and High-Expansion Foam,”
- b) NFPA 12, “Carbon Dioxide Extinguishing Systems,”
- c) NFPA 12A, “Halon 1301 Fire Extinguishing Systems” (see Note A-2.1.3.5.(3)(c) and (d)),
- d) NFPA 12B, “Halon 1211 Fire Extinguishing Systems” (see Note A-2.1.3.5.(3)(c) and (d)),
- e) NFPA 17, “Dry Chemical Extinguishing Systems,” or
- f) NFPA 17A, “Wet Chemical Extinguishing Systems.”

4) The design and installation of a water-based special fire suppression system shall conform to one of the following standards:

- a) NFPA 15, “Water Spray Fixed Systems for Fire Protection,” or
- b) NFPA 16, “Installation of Foam-Water Sprinkler and Foam-Water Spray Systems.”

5) Wetting agents used in conjunction with water-based fire suppression systems shall conform to NFPA 18, “Wetting Agents.”

6) A hazard for which a fire suppression system has been designed is not permitted to be increased unless the level of fire protection is also commensurately increased.

7) Operating and maintenance instructions for a special fire suppression system shall be posted in proximity to the equipment and, if manual controls are provided, shall be posted near the manual controls.

8) Valves and controls for a special fire suppression system shall be clearly marked to indicate their function and shall be accessible at all times.

2.1.3.6. Inspection, Maintenance and Testing of Fire Safety Devices

(See Note A-2.1.3.6.)

1) Where specific references to the inspection, maintenance and testing of fire safety devices and *building* fire safety features are not made in this Code, such devices and features shall be maintained to ensure they operate as per their design or function according to their original intent.

2.1.3.7. Integrated Life Safety and Fire Protection Systems

1) Where life safety and fire protection systems are installed, they shall be tested in accordance with the British Columbia Building Code.

2.1.4. Posted Information

2.1.4.1. Posting

- 1) Where a sign, notice, placard or information is required to be posted, it shall be
 - a) clearly legible, and
 - b) except as provided in Sentence (2), permanently mounted in a conspicuous or prominent location in proximity to the situation to which it refers.
- 2) Where the situation for which posting is required is of a temporary nature, permanent mounting need not be provided.

2.1.4.2. Maintenance

- 1) Every sign, notice, placard or information that is required to be posted shall be maintained in conformance with Article 2.1.4.1.

2.1.5. Portable Extinguishers

2.1.5.1. Selection and Installation

- 1) Portable extinguishers shall be installed in all *buildings* except *dwelling units*.
- 2) Except as otherwise required by this Code, portable extinguishers shall be selected and installed in accordance with NFPA 10, “Portable Fire Extinguishers.”
- 3) Notwithstanding the requirements of Sentence (2), portable extinguishers used to comply with this Code shall conform to the following performance standards as applicable:
 - a) CAN/ULC-S503, “Carbon-Dioxide Fire Extinguishers,”
 - b) CAN/ULC-S504, “Dry Chemical Fire Extinguishers,”
 - c) CAN/ULC-S507, “Water Fire Extinguishers,”
 - d) CAN/ULC-S512-M, “Halogenated Agent Hand and Wheeled Fire Extinguishers,”
 - e) CAN/ULC-S554, “Water Based Agent Fire Extinguishers,” and
 - f) CAN/ULC-S566, “Halocarbon Clean Agent Fire Extinguishers.”
- 4) Notwithstanding the requirements of Sentence (2), portable extinguishers shall be rated and identified in conformance with CAN/ULC-S508, “Rating and Fire Testing of Fire Extinguishers.”
- 5) Portable extinguishers in proximity to a fire hazard shall be located so as to be accessible without exposing the operator to undue risk. (See Note A-2.1.5.1.(5).)
- 6) Portable extinguishers that are subject to corrosion shall not be installed in a corrosive environment unless they are provided with appropriate corrosion protection.