

# British Columbia Fire Code 2018

## List of 1.01 Revisions

November 2019

The following temporary list of revisions has been prepared to deliver the final code language in advance of the updated code being published online.

This package is not intended to be used as a replacement package.



National Research  
Council Canada

Conseil national  
de recherches Canada



Office of Housing and  
Construction Standards

Disclaimer: This is not a complete version of the British Columbia Fire Code.  
The updated code will be available at [www.bcpublications.ca](http://www.bcpublications.ca).

**PROVINCE OF BRITISH COLUMBIA**  
**ORDER OF THE MINISTER OF**  
**MUNICIPAL AFFAIRS AND HOUSING**

*Fire Services Act*

Ministerial Order No. FSA 2018 2

I, Selina Robinson, Minister of Municipal Affairs and Housing, order that, effective December 12, 2019, the British Columbia Fire Code established by Minister Order No. FSA 2018 1 dated October 16, 2018, is amended by incorporating the changes included in the amended and consolidated British Columbia Fire Code attached as Schedule 1.

November 18, 2019  
Date

  
Minister of Municipal Affairs and Housing

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*(This part is for administrative purposes only and is not part of the Order.)*

**Authority under which Order is made:**

Act and section: Fire Services Act, R.S.B.C. 1996, c. 144, s. 47

Other: \_\_\_\_\_

## Section 1.4. Terms and Abbreviations

### 1.4.1. Definitions of Words and Phrases

#### 1.4.1.1. Non-defined Terms

**1)** Words and phrases used in this Code that are not included in the list of definitions in Article 1.4.1.2. shall have the meanings that are commonly assigned to them in the context in which they are used, taking into account the specialized use of terms by the various trades and professions to which the terminology applies.

**2)** Where objectives and functional statements are referred to in this Code, they shall be the objectives and functional statements described in Parts 2 and 3.

**3)** Where acceptable solutions are referred to in this Code, they shall be the provisions stated in Parts 2 to 7 of Division B.

**4)** Where alternative solutions are referred to in this Code, they shall be the alternative solutions mentioned in Clause 1.2.1.1.(1)(b).

#### 1.4.1.2. Defined Terms

**1)** The words and terms in italics in this Code shall have the following meanings:

*Access to exit* means that part of a *means of egress* within a *floor area* that provides access to an *exit* serving the *floor area*.

*Air-supported structure* means a structure consisting of a pliable membrane that achieves and maintains its shape and support by internal air pressure.

*Appliance* means a device to convert fuel into energy and includes all components, controls, wiring and piping required to be part of the device by the applicable standard referred to in this Code.

*Assembly occupancy* (Group A) means the *occupancy* or the use of a *building*, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food or drink.

*Atmospheric storage tank* means a *storage tank* designed to operate at pressures from atmospheric to 3.5 kPa (gauge).

*Authority having jurisdiction* means the governmental body responsible for the enforcement of any part of this Code or the official or agency designated by that body to exercise such a function.

*Basement* means a *storey* or *storeys* of a *building* located below the *first storey*.

*Breeching* means a *flue pipe* or chamber for receiving *flue* gases from one or more *flue* connections and for discharging these gases through a single *flue* connection.

*Building* means any structure used or intended for supporting or sheltering any use or *occupancy*.

*Business and personal services occupancy* (Group D) means the *occupancy* or use of a *building* or part thereof for the transaction of business or the rendering or receiving of professional or personal services.

*Care* means the provision of services other than *treatment* by or through *care* facility management to residents who require these services because of cognitive, physical or behavioural limitations.

*Care occupancy* (Group B, Division 3) means the *occupancy* or use of a *building* or part thereof where *care* is provided to residents. (See Note A-1.4.1.2.(1).)

*Chimney* means a primarily vertical shaft enclosing at least one *flue* for conducting *flue* gases to the outdoors.

*Class B fire* means a fire involving a *flammable liquid* or *combustible liquid*, fat or grease.

*Closed container* means a container sealed by means of a lid or other device such that neither liquid nor vapour will escape from it at ordinary temperatures.

*Closure* means a device or assembly for closing an opening through a *fire separation* or an exterior wall, such as a door, a shutter, wired glass or glass block, and includes all components such as hardware, closing devices, frames and anchors.

*Combustible construction* means that type of construction that does not meet the requirements for *noncombustible construction* or *encapsulated mass timber construction*.

*Combustible dusts* means dusts and particles that are ignitable and liable to produce an explosion.

*Combustible fibres* means finely divided, combustible vegetable or animal fibres and thin sheets or flakes of such materials which, in a loose, unbaled condition, present a flash fire hazard, including cotton, wool, hemp, sisal, jute, kapok, paper and cloth.

*Combustible liquid* means a liquid having a *flash point* at or above 37.8°C and below 93.3°C. (See Subsection 4.1.2. of Division B.)

*Community care facilities* means community care facilities as defined in the *Community Care and Assisted Living Act*.

*Dangerous goods* means products, materials or substances that are

- (a) regulated by TC SOR/2008-34, “Transportation of Dangerous Goods Regulations (TDGR)” (see Table 3.2.7.1. of Division B), or
- (b) classified as controlled products under HC SOR/2015-17, “Hazardous Products Regulations” (see Note A-Table 3.2.7.1. of Division B).

(See Note A-1.4.1.2.(1).)

*Detention occupancy* (Group B, Division 1) means the *occupancy* by persons who are restrained from or are incapable of evacuating to a safe location without the assistance of another person because of security measures not under their control.

*Dispenser sump* means a liquid-tight container intended for installation under a dispensing unit for the collection of any internal leakage of *flammable liquid* and *combustible liquid* from the dispensing unit.

*Distilled beverage alcohol* means a beverage that is produced by fermentation and contains more than 20% by volume of water-miscible alcohol.

*Distillery* means a *process plant* where *distilled beverage alcohols* are produced, concentrated or otherwise processed, and includes facilities on the same site where the concentrated products may be blended, mixed, stored or packaged.

*Dwelling unit* means a *suite* operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

*Electrical equipment vault* means an isolated enclosure, either above or below ground, with fire-resisting walls, ceilings and floors, for housing transformers and other electrical equipment.

*Electrical service room* means a room or space provided in a *building* to accommodate *building* electrical service equipment and constructed in accordance with the British Columbia Building Code.

*Encapsulated mass timber construction* means that type of construction in which a degree of fire safety is attained by the use of encapsulated mass timber elements with an *encapsulation rating* and minimum dimensions for structural members and other *building assemblies*.

*Encapsulation rating* means the time in minutes that a material or assembly of materials will delay the ignition and combustion of encapsulated mass timber elements when it is exposed to fire under specified conditions of test and performance criteria, or as otherwise prescribed by this Code.

*Exit* means that part of a *means of egress*, including doorways, that leads from the *floor area* it serves to a separate *building*, an open public thoroughfare, or an exterior open space protected from fire exposure from the *building* and having access to an open public thoroughfare. (See Note A-1.4.1.2.(1).)

*Fire compartment* means an enclosed space in a *building* that is separated from all other parts of the *building* by enclosing construction providing a *fire separation* having a required *fire-resistance rating*.

*Fire damper* means a *closure* consisting of a damper that is installed in an air distribution system or a wall or floor assembly and that is normally held open but designed to close automatically in the event of a fire in order to maintain the integrity of the *fire separation*.

*Fire-protection rating* means the time in minutes or hours that a *closure* will withstand the passage of flame when exposed to fire under specified conditions of test and performance criteria, or as otherwise prescribed in the British Columbia Building Code.

*Fire-resistance rating* means the time in minutes or hours that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of test and performance criteria, or as determined by extension or interpretation of information derived therefrom as prescribed in the British Columbia Building Code. (See Note A-1.4.1.2.(1).)

*Fire separation* means a construction assembly that acts as a barrier against the spread of fire. (See Note A-1.4.1.2.(1).)

*Street* means any highway, road, boulevard, square or other improved thoroughfare 9 m or more in width, that has been dedicated or deeded for public use and is accessible to fire department vehicles and equipment.

*Suite* means a single room or series of rooms of complementary use, operated under a single tenancy, and includes *dwelling units*, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual stores and individual or complementary rooms for *business and personal services occupancies*.  
(See Note A-1.4.1.2.(1).)

*Supervisory staff* means those occupants of a *building* who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.

*Tank vehicle* means any vehicle, other than railroad tank cars and boats, with a cargo tank having a capacity of more than 450 L, mounted or built as an integral part of the vehicle and used for the transportation of *flammable liquids* or *combustible liquids* and including tank trucks, trailers and semi-trailers.

*Transition sump* means an underground liquid-tight container intended for installation where mechanical connection or transition takes place for the collection of any internal leakage of *flammable liquid* and *combustible liquid*.

*Treatment* means the provision of medical or other health-related intervention to persons, where the administration or lack of administration of these interventions may render them incapable of evacuating to a safe location without the assistance of another person. (See Note A-1.4.1.2.(1)).

*Treatment occupancy* (Group B, Division 2) means the *occupancy* or use of a *building* or part thereof for the provision of *treatment*, and where overnight accommodation is available to facilitate the *treatment*. (See Note A-1.4.1.2.(1).)

*Turbine sump* means a container designed to provide access to equipment and to contain minor leakage, and installed to prevent water ingress.

*Unstable liquid* means a liquid, including *flammable liquids* and *combustible liquids*, that is chemically reactive to the extent that it will vigorously react or decompose at or near normal temperature and pressure conditions or that is chemically unstable when subject to impact.

*Vertical service space* means a shaft oriented essentially vertically that is provided in a *building* to facilitate the installation of *building services* including mechanical, electrical and plumbing installations and facilities such as elevators, refuse chutes and linen chutes.

## 1.4.2. Symbols and Other Abbreviations

### 1.4.2.1. Symbols and Other Abbreviations

**1)** The symbols and other abbreviations in this Code shall have the meanings assigned to them in this Article and Article 1.3.2.1. of Division B.

|           |                        |
|-----------|------------------------|
| cm.....   | centimetre(s)          |
| cSt.....  | centistoke(s)          |
| °C.....   | degree(s) Celsius      |
| h.....    | hour(s)                |
| kg.....   | kilogram(s)            |
| kPa.....  | kilopascal(s)          |
| L.....    | litre(s)               |
| m.....    | metre(s)               |
| max.....  | maximum                |
| min. .... | minimum                |
| min ..... | minute(s)              |
| MJ.....   | megajoule(s)           |
| mm .....  | millimetre(s)          |
| n/a.....  | not applicable         |
| No. ....  | number(s)              |
| pS/m..... | pico Siemens per metre |
| s.....    | second(s)              |
| St.....   | stoke(s)               |

Each provision in Division B has been analyzed to determine what it is intended to achieve. The resultant intent statements clarify what undesirable results each provision seeks to preclude. These statements are not a legal component of the Code, but are advisory in nature, and can help Code users establish performance targets for alternative solutions. They are published as part of the online Code subscriptions and as a separate electronic document entitled “Supplement to the NFC 2015: Intent Statements,” which is available on NRC’s Web site.

### Areas of Performance

A subset of the acceptable solutions in Division B may establish criteria for particular types of designs (e.g. certain types of materials, components, assemblies, or systems). Often such subsets of acceptable solutions are all attributed to the same objective: Fire Safety for example. In some cases, the designs that are normally used to satisfy this subset of acceptable solutions might also provide some benefits that could be related to some other objective: Fire Protection of the Building or Facility for example. However, if none of the applicable acceptable solutions are linked to Objective OP1, Fire Protection of the Building or Facility, it is not necessary that alternative solutions proposed to replace these acceptable solutions provide a similar benefit related to Fire Protection of the Building or Facility. In other words, the acceptable solutions in Division B establish acceptable levels of performance for compliance with the Code only in those areas defined by the objectives and functional statements attributed to the acceptable solutions.

### Applicable Acceptable Solutions

In demonstrating that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B, its evaluation should not be limited to comparison with the acceptable solutions to which an alternative is proposed. It is possible that acceptable solutions elsewhere in the Code also apply. The proposed alternative solution may be shown to perform as well as the most apparent acceptable solution, which it is replacing, but may not perform as well as other relevant acceptable solutions. For example, the use of sprinklers to protect the exterior wall of a building may permit combustible materials to be stored closer to that wall than otherwise permitted by the Code, but the proximity of the stored materials to the wall may contravene firefighter access provisions elsewhere in the Code. All applicable acceptable solutions should be taken into consideration in demonstrating the compliance of an alternative solution.

#### A-1.4.1.2.(1) Defined Terms.

##### Care Occupancy

Support services rendered by or through care facility management refer to services provided by the organization that is responsible for the care for a period exceeding 24 consecutive hours. They do not refer to services provided by residents of dwelling units or suites, or to services arranged directly by residents of dwelling units or suites with outside agencies.

In the context of care occupancies, these services may include a daily assessment of the resident’s functioning, awareness of their whereabouts, the making of appointments for residents and reminding them of those appointments, the ability and readiness to intervene if a crisis arises for a resident, supervision in areas of nutrition or medication, and provision of transient medical services. Services may also include activities of daily living such as bathing, dressing, feeding, and assistance in the use of washroom facilities, etc. No actual treatment is provided by or through care facility management.

##### Dangerous Goods

In previous editions of the [BCFC](#), the terminology used to identify dangerous goods came from TC SOR/2008-34, “Transportation of Dangerous Goods Regulations (TDGR).” The TDGR apply solely to the adequate identification of hazards related to dangerous goods in the contexts of transportation and emergency response.

Dangerous goods in the workplace are identified in accordance with the “Workplace Hazardous Materials Information System (WHMIS),” established in accordance with the Hazardous Products Act. The WHMIS identification system is specifically designed with the users of the product in mind.

This edition of the [BCFC](#) identifies dangerous goods as products regulated by the TDGR or classified under the WHMIS. In order to harmonize these two nomenclatures for dangerous goods, class descriptors were developed taking into consideration both the TDGR and WHMIS classification systems. The [BCFC 2018](#) nomenclature [uses a](#) descriptive approach to classifying dangerous goods, which is similar to the one [used](#) by the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) developed by the United Nations (UN). Canada has actively participated in the development of the GHS and has committed to its implementation through the TDGR and WHMIS regulations.

The [BCFC 2018](#) nomenclature takes a common sense approach that corresponds more closely to how people refer to dangerous goods on a daily basis, blending TDGR and WHMIS terminology without using non-descript numbers and letters as previously found in the [BCFC](#), TDGR and WHMIS.

**Table 1.3.1.2. (continued)**  
**Documents Referenced in the British Columbia Fire Code**  
 Forming Part of Sentence 1.3.1.2.(1)

| Issuing Agency | Document Number <sup>(1)</sup>           | Title of Document <sup>(2)</sup>  | Code Reference  |
|----------------|--|---|---|
| TC             | SOR/2008-34                              | Transportation of Dangerous Goods Regulations (TDGR)                          | 1.4.1.2.(1) <sup>(3)</sup><br>A-1.4.1.2.(1) <sup>(3)</sup><br>3.1.2.1.(1)<br>3.2.7.1.(3)<br>Table 3.2.7.1.<br>Table 3.2.7.6.<br>3.2.7.14.(1)<br>3.2.7.14.(4)<br>3.2.7.15.(2)<br>3.3.4.1.(3)<br>A-3.2.7.1.(3)(b)<br>A-3.2.7.1.(3)<br>A-3.2.7.6.(3)<br>A-3.2.7.14.(1)<br>4.1.1.1.(3)<br>4.2.3.1.(1)<br>4.2.3.2.(2)<br>A-4.1.2.1.<br>A-4.2.2.3.(2) |
| TC             | 2001                                     | Standards Respecting Pipeline Crossings Under Railways                        | 4.5.6.5.(3)   |
| TC             | SOR/82-1015                              | Railway Prevention of Electric Sparks Regulations                             | 4.7.4.5.(2)<br>4.8.5.1.(1)  |
| TC             | General Order No. O-32,<br>C.R.C., c1148 | Flammable Liquids Bulk Storage Regulations                                    | 4.5.6.5.(4)<br>4.7.2.2.(1)<br>4.7.4.1.(2)   |
| ULC            | CAN/ULC-S109-03                          | Flame Tests of Flame-Resistant Fabrics and Films                              | 2.3.2.1.(1)   |
| ULC            | CAN/ULC-S137-07                          | Fire Growth of Mattresses (Open Flame Test)                                   | 2.3.2.3.(2)   |
| ULC            | CAN/ULC-S503-05                          | Carbon-Dioxide Fire Extinguishers   | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S504-12                          | Dry Chemical Fire Extinguishers   | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S507-05                          | Water Fire Extinguishers  | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S508-02                          | Rating and Fire Testing of Fire Extinguishers                                 | 2.1.5.1.(4)   |
| ULC            | CAN/ULC-S512-M87                         | Halogenated Agent Hand and Wheeled Fire Extinguishers                         | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S536-13                          | Inspection and Testing of Fire Alarm Systems                                  | 6.3.1.2.(1)   |
| ULC            | CAN/ULC-S552-14                          | Inspection, Testing and Maintenance of Smoke Alarms                           | 6.7.1.1.(1)   |
| ULC            | CAN/ULC-S553-14                          | Installation of Smoke Alarms  | 2.1.3.3.(3)   |
| ULC            | CAN/ULC-S554-05                          | Water Based Agent Fire Extinguishers  | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S561-13                          | Installation and Services for Fire Signal Receiving Centres and Systems       | 6.3.1.3.(1)   |
| ULC            | CAN/ULC-S566-05                          | Halocarbon Clean Agent Fire Extinguishers                                     | 2.1.5.1.(3)   |
| ULC            | CAN/ULC-S601-14                          | Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids | 4.3.1.2.(1)<br>4.3.3.2.(1)  |
| ULC            | CAN/ULC-S602-14                          | Aboveground Steel Tanks for Fuel Oil and Lubricating Oil                      | 4.3.1.2.(1)   |
| ULC            | CAN/ULC-S603-14                          | Steel Underground Tanks for Flammable and Combustible Liquids                 | 4.3.1.2.(1)<br>4.4.3.2.(4)  |

## Section 2.2. Fire Separations and Encapsulation Materials

### 2.2.1. General

#### 2.2.1.1. Fire Separations

**1)** Where a *building* contains more than one *major occupancy*, such *occupancies* shall be separated from each other in conformance with the British Columbia Building Code.

**2)** Where rooms or spaces within a *building* contain a *high-hazard industrial occupancy*, such *occupancy* shall be separated from the remainder of the *building* by *fire separations* in conformance with this Code and the British Columbia Building Code.

**3)** Rooms, corridors, shafts and other spaces shall be separated where practicable by *fire separations* conforming to the British Columbia Building Code.

#### 2.2.1.2. Damage to Fire Separations

**1)** Where *fire separations* are damaged so as to affect their integrity, they shall be repaired so that the integrity of the *fire separation* is maintained.

### 2.2.2. Closures

#### 2.2.2.1. Openings in Fire Separations

**1)** Openings in *fire separations* shall be protected with *closures* in conformance with the British Columbia Building Code.

**2)** Where *closures* in *fire separations* are replaced, the replacements shall be in conformance with the British Columbia Building Code.

#### 2.2.2.2. Damage to Closures

**1)** Where *closures* are damaged so as to affect the integrity of their *fire-protection rating*, they shall be repaired so that their integrity is maintained in conformance with Article 2.2.2.1.

#### 2.2.2.3. Protective Guarding Devices

**1)** Protective guarding devices shall be

- a) provided where necessary to prevent damage to the mechanical components of doors in *fire separations*, and
- b) installed so as not to interfere with the proper operation of the doors.

#### 2.2.2.4. Inspection and Maintenance

**1)** Defects that interfere with the operation of *closures* in *fire separations* shall be corrected, and such *closures* shall be maintained to ensure that they are operable at all times by

- a) keeping fusible links and other heat-actuated devices undamaged and free of paint and dirt,
- b) keeping guides, bearings and stay rolls clean and lubricated,
- c) making necessary adjustments and repairs to door hardware and accessories to ensure proper closing and latching, and
- d) repairing or replacing inoperative parts of hold-open devices and automatic releasing devices.

**2)** Except where they are equipped with hold-open devices conforming to the British Columbia Building Code, doors in *fire separations* that are required to be equipped with self-closing devices shall be inspected at intervals not greater than 24 h to ensure that they remain in the closed position when not in use.

**3)** Doors in *fire separations* shall be operated at intervals not greater than one month to ensure that they are properly maintained in accordance with Sentence (1), as specified in the fire safety plan prepared in conformance with Section 2.8.

- 4) *Closures in fire separations* shall not be obstructed, blocked, wedged open, or altered in any way that would prevent the intended operation of the *closure*.
- 5) *Fire dampers, smoke dampers, combination smoke/fire dampers and fire stop flaps* shall be
  - a) inspected at intervals not greater than 12 months to ensure that they are in place and not obviously damaged or obstructed, and
  - b) tested in accordance with NFPA 80, “Fire Doors and Other Opening Protectives.”

#### 2.2.2.5. Fire Door Signs

- 1) Every door used as a *closure* with a required *fire-protection rating* shall have a permanent sign, clearly displaying the words “FIRE DOOR KEEP CLOSED”, posted on the visible side of the door when it is in the open position, except where the door is
  - a) located between a corridor and an adjacent sleeping room in a hospital or a nursing home,
  - b) located between a corridor and an adjacent classroom,
  - c) located between a public corridor and a *suite* of Group C or D *occupancy* (See Note A-2.2.2.5.(1)(c)), or
  - d) fitted with an acceptable hold-open device designed to be released by a signal from a fire detector, fire alarm system or sprinkler system.

### 2.2.3. Encapsulation Materials

#### 2.2.3.1. Damaged or Removed Encapsulation Materials

- 1) Where encapsulation materials or an assembly of materials that provide protection for mass timber elements in encapsulated mass timber construction are damaged or removed so as to effect their integrity, they shall be repaired or replaced so that the encapsulation rating of the materials is maintained.
- 2) Where encapsulation materials or an assembly of materials described in Sentence (1) are repaired or replaced, the repairs or replacements shall be in conformance with the British Columbia Building Code.

## Section 2.6. Service Equipment

### 2.6.1. Heating, Ventilating and Air-conditioning

#### 2.6.1.1. Installation

**1)** Heating, ventilating and air-conditioning *appliances* and equipment shall be installed in conformance with the British Columbia Building Code.

#### 2.6.1.2. Coal and Wood Bins

**1)** Coal and wood bins shall be located not less than 1.2 m from the *appliance* served.

#### 2.6.1.3. Hoods, Ducts and Filters

**1)** Hoods, ducts and filters subject to accumulations of combustible deposits shall be inspected at intervals not greater than 7 days, and shall be cleaned if the accumulation of such deposits creates a fire hazard.

#### 2.6.1.4. Chimneys, Flues and Flue Pipes

**1)** Every *chimney*, *flue* and *flue pipe* shall be inspected to identify any dangerous condition

- a) at intervals not greater than 12 months,
- b) at the time of addition of any *appliance*, and
- c) after any *chimney* fire.

(See Note A-2.6.1.4.(1).)

**2)** *Chimneys*, *flues* and *flue pipes* shall be cleaned as often as necessary to keep them free from dangerous accumulations of combustible deposits. (See Note A-2.6.1.4.(2).)

**3)** A *chimney*, *flue*, or *flue pipe* shall be replaced or repaired to eliminate

- a) any structural deficiency or decay (see Note A-2.6.1.4.(3)(a)), and
- b) all abandoned or unused openings that are not effectively sealed in a manner that would prevent the passage of fire or smoke.

#### 2.6.1.5. Clearances

**1)** Required clearances between *chimneys*, *flue pipes* or *appliances* and *combustible construction* or *encapsulated mass timber construction* shall be maintained in conformance with the British Columbia Building Code.

**2)** Combustible materials shall not be located within the required clearance space surrounding *chimneys*, *flue pipes* or *appliances*, or adjacent to ash pit or cleanout doors.

#### 2.6.1.6. Operation and Maintenance Procedures

**1)** Heating, ventilating and air-conditioning systems, including *appliances*, *chimneys* and *flue pipes*, shall be operated and maintained so as not to create a hazardous condition.

**2)** Except for self-contained systems within *dwelling units*, disconnect switches for mechanical air-conditioning and ventilating systems shall be operated at intervals not greater than 12 months to establish that the system can be shut down in an emergency.

#### 2.6.1.7. Ventilation Shafts

**1)** Ventilation shafts shall be used only for ventilating purposes.

## Section 2.9. Tents and Air-Supported Structures

### 2.9.1. General

#### 2.9.1.1. Tents and Air-Supported Structures

- 1) Tents and *air-supported structures* shall conform to the British Columbia Building Code.

### 2.9.2. Materials

#### 2.9.2.1. Flame-Retardant Treatments

- 1) Flame-retardant treatments shall be renewed as often as is required to ensure that the material will pass the match flame test in NFPA 705, “Field Flame Test for Textiles and Films.” (See Note A-2.3.2.2.(1).)

### 2.9.3. Fire Hazards and Control

#### 2.9.3.1. Electrical Systems

- 1) The electrical system in a tent or *air-supported structure* shall be maintained and operated in a safe manner.
- 2) Portable electrical systems shall be inspected for fire hazards and defects shall be corrected before the tent or *air-supported structure* is occupied by the public.
- 3) The electrical system and equipment in a tent or *air-supported structure*, including electrical fuses and switches, shall be inaccessible to the public.
- 4) Cables on the ground in areas used by the public in a tent or *air-supported structure* shall be placed in trenches or protected by covers to prevent damage from traffic.

#### 2.9.3.2. Combustible Materials

- 1) Hay, straw, shavings or similar combustible materials other than necessary for the daily feeding and care of animals shall not be permitted within a tent or *air-supported structure* used for an *assembly occupancy*, except that sawdust and shavings are permitted to be used if kept damp.

#### 2.9.3.3. Smoking and Open Flame Devices

- 1) Smoking and open flame devices shall not be permitted in a tent or *air-supported structure* while it is occupied by the public.

#### 2.9.3.4. Fire Watch

- 1) A person shall be employed to watch for fires when a tent or *air-supported structure* is occupied by more than 1 000 persons.
- 2) A person employed to watch for fires as described in Sentence (1) shall
  - a) be familiar with all fire safety features, including the fire safety plan as provided in conformance with Section 2.8. and the condition of *exits*, and
  - b) patrol the area to ensure that the *means of egress* are kept clear and that requirements of the *authority having jurisdiction* are enforced.

#### 2.9.3.5. Fire Alarm System

- 1) Where tents and *air-supported structures* are designed to accommodate more than 1 000 persons, a fire alarm and emergency communication system shall be provided. (See Note A-2.9.3.5.(1).)

#### 2.9.3.6. Blower Engines

- 1) Internal combustion engines used to power supplementary blowers required by the British Columbia Building Code shall be operated and maintained in conformance with Section 6.5.

**Table 2.16.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 2**  
 Forming Part of Sentence 2.16.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup>        |                       |
|--|-----------------------|
| (3)  | [F82-OP1.2]           |
|  | [F82-OS1.2]           |
| (4)  | [F81-OP1.2]           |
|  | [F81-OS1.2]           |
| (5)  | [F82-OP1.2]           |
|  | [F82-OS1.2]           |
| <b>2.2.2.5. Fire Door Signs</b>                            |                       |
| (1)  | [F02,F03,F05-OS1.2]   |
| <b>2.2.3.1. Damaged or Removed Encapsulation Materials</b> |                       |
| (1)  | [F02-OS1.2]           |
| (2)  | [F02-OS1.2]           |
| <b>2.3.1.2. Movable Partitions and Screens</b>             |                       |
| (1)  | [F02-OS1.2]           |
| <b>2.3.1.3. Decorative Materials</b>                       |                       |
| (1)  | [F02-OS1.2]           |
| <b>2.3.1.4. Interconnected Floor Spaces</b>                |                       |
| (1)  | [F02-OP1.2]           |
|  | [F02-OS1.2]           |
| <b>2.3.1.5. Combustible Materials in Classrooms</b>        |                       |
| (1)  | [F03-OS1.2]           |
| <b>2.3.2.1. Drapes, Curtains and Decorative Materials</b>  |                       |
| (1)  | [F02-OP1.2]           |
|  | [F02-OS1.2,OS1.5]     |
| <b>2.3.2.2. Flame-Retardant Treatments</b>                 |                       |
| (1)  | [F82-OP1.2]           |
|  | [F82-OS1.2,OS1.5]     |
| <b>2.3.2.3. Textiles in Group B Occupancies</b>            |                       |
| (1)  | [F02-OP1.2]           |
|  | [F02-OS1.2]           |
| (2)  | [F02-OS1.2]           |
|  | [F02-OP1.2]           |
| <b>2.4.1.1. Accumulation of Combustible Materials</b>      |                       |
| (1)  | [F01,F02-OS1.2,OS1.1] |
|  | [F01,F02-OP1.2,OP1.1] |
| (2)  | [F01,F02-OS1.2]       |
|  | [F01,F02-OP1.2]       |

**A-2.6.1.4.(1)** External inspection of enclosed chimneys and surrounding construction may require the installation of one or more access openings in the enclosure surrounding the chimney. The presence of scorched or charred adjacent combustible construction or encapsulated mass timber construction will indicate the need for further investigation of the cause of the overheating.

Internal inspection of chimneys can be accomplished by lowering a light from the top, insertion of a light at the bottom or at intermediate locations, together with the use of one or more mirrors.

During inspection of a chimney connected to an operating appliance, the presence of dense smoke at the outlet will indicate improper operation of the appliance, incorrect sizing of the chimney or that unsuitable fuels are being used. These factors must be promptly corrected to reduce the accumulation of combustible deposits on the chimney and flue pipe walls.

**A-2.6.1.4.(2)** The presence in a chimney of deposits of soot or creosote in excess of 3 mm thick will indicate the need for immediate cleaning, possible modification of burning procedures, and more frequent inspections.

**A-2.6.1.4.(3)(a)** Structural deficiencies are deviations from required construction, such as the absence of a liner or inadequate design of supports or ties. Instances of decay are cracking, settling, crumbling mortar, distortion, advanced corrosion, separation of sections, or loose or broken supports.

**A-2.6.1.9.(3)** Depending on the amount of cooking equipment usage, the entire exhaust system, including grease extractors, should be inspected at intervals not greater than 7 days to determine if grease or other residues have been deposited within. When grease or other residues are in evidence as deposits within the hood, grease removal devices, or ducts, the system should be cleaned. In general, exhaust systems should be cleaned at intervals not greater than 12 months, but in the case of deep fat cooking, char broiling or similar cooking operations, the systems should be cleaned at intervals not greater than 3 months.

**A-2.7.1.3.(1)** The BCFC uses two criteria to determine the maximum permissible occupant load in existing buildings: the exit capacity, and the total clear floor space per person. Assuming that exit capacity is sufficient, the value of 0.4 m<sup>2</sup>/person ensures that a crowd of people will be able to move steadily toward the exits.

Table 3.1.17.1. of Division B of the BCBC should not be used to determine the maximum permissible occupant load for rooms or spaces in existing buildings. Table 3.1.17.1. is intended to allow a building designer to calculate a minimum occupant load for the purpose of designing certain building features, such as means of egress and fire alarm systems. The designer may choose to design for more or fewer persons, in which case the actual design occupant load must be posted in a conspicuous location. In an existing building, the process must be calculated in reverse, from the measured exit capacity, or other building features, to a maximum permissible occupant load. The result of the calculation may not be, and is not intended to be, consistent with values obtained using Table 3.1.17.1.

Net floor space referred to in Clause (a) is the floor space in a room excluding areas occupied by structural features and fixtures, such as tables, furnishings or equipment. In certain assembly occupancies, where the number and type of furnishings may change according to the nature of the function taking place, it may be appropriate to calculate maximum occupant loads for each of the different functions anticipated.

It should also be noted that Article 2.1.3.1. of this Code requires fire alarm systems to be installed in conformance with the BCBC. This means that if the occupant load determined by Sentence 2.7.1.3.(1) exceeds that for which a fire alarm system is required by the BCBC, a fire alarm system must be provided in the building.

**A-2.7.1.4.(2)** Sentence 3.1.17.1.(2) of Division B of the BCBC requires that the occupant load used in the design of a floor area be posted if it differs from that determined by Table 3.1.17.1. of Division B of the BCBC.

**A-2.7.3.1.(1)** Subsections 3.2.7. and 3.4.5. of Division B of the BCBC describe the requirements for the placement of exit signs and for emergency and non-emergency lighting.

It is not intended that existing buildings or their systems and components be required to be upgraded with each new edition of the British Columbia Building Code unless the requirements apply per Article 1.1.1.1. of Division A of the British Columbia Building Code. For example, newly installed or replaced exit signs must conform to the requirements of the current edition of the British Columbia Building Code, but other existing signs that complied when the building was constructed or previously altered are not required to be upgraded as a result (unless as a function of ongoing maintenance).

- 3)** Where a product has multiple classes, the applicable small quantity exemption referred to in Sentence (2) shall be determined using
- Column A of Table 3.2.7.1. based on the class having precedence, as established in Section 2.8 of TC SOR/2008-34, “Transportation of Dangerous Goods Regulations (TDGR),”
  - Column B of Table 3.2.7.1. based on the class having precedence, as established in Table A-3.2.7.1.(3)(b), for controlled products under the “Workplace Hazardous Materials Information System (WHMIS)” as classified in Part 7 of HC SOR/2015-17, “Hazardous Products Regulations” (see Note A-3.2.7.1.(3)(b)), or
  - when the class having precedence cannot be established, Column C of Table 3.2.7.1. based on the lesser of the two small quantity exemptions.
- (See Note A-3.2.7.1.(3).)

**Table 3.2.7.1.**  
**Small Quantity Exemptions for Dangerous Goods**  
 Forming Part of Sentences 3.2.7.1.(1) and (3), and 3.3.4.1.(2) and (3)

| BCFC Class   | Column A |  | Column B                   | Column C                                |
|--|----------|--|----------------------------|---|
|  |          | TDG Class <sup>(1)</sup>   | WHMIS Class <sup>(2)</sup> | Maximum Exempt Amount of Stored Product |
| Explosives   | 1        | Explosives   | –                          | See Article 3.1.1.3.                    |
| Compressed Gases<br><br>flammable gases/aerosols<br><br>non-flammable, non-toxic gases<br>oxidizing gases<br>toxic gases | 2        | Gases  | A                          |   |
|  |          | Division 1 <sup>(3)</sup> flammable gases  | B1                         | 25 kg <sup>(4)</sup>                    |
|  |          |  | B5                         | See Subsection 3.2.5.                   |
|  |          | Division 2 non-flammable, non-toxic gases  | A                          | 150 kg                                  |
|  |          | Division 2 with subsidiary Class 5.1   | A+C                        | 75 kg <sup>(4)</sup>                    |
|  |          | Division 3 <sup>(5)</sup> toxic gases  | A+D1                       | 0                                       |
|  |          |  | A+D2                       |   |
|  |          |  | A+E                        |   |
| Flammable Liquids  | 3        | Flammable Liquids  | B2                         | See Part 4                              |
|  |          |  | B3                         |   |
| Flammable Solids<br>Pyrophoric Materials<br>Water-Reactive Substances  | 4        | Flammable Solids   | –                          |   |
|  |          | Division 1 flammable solids  | B4                         | 100 kg <sup>(6)</sup>                   |
|  |          | Division 2 substances liable to spontaneous combustion   | –                          | 50 kg                                   |
|  |          | Division 3 water-reactive substances   | B6                         |   |
| Oxidizing Substances <sup>(7)</sup><br><br>oxidizers<br><br>organic peroxides  | 5        | Oxidizing Substances and Organic Peroxides   | –                          |   |
|  |          | Division 1 oxidizing substances <sup>(8)</sup><br>Packing Group I<br>Packing Group II<br>Packing Group III | –                          | 250 kg or 250 L                         |
|  |          | Division 2 organic peroxides   | C <sup>(9)</sup>           | 100 kg or 100 L                         |

**Table 3.4.1.1.**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 3**  
 Forming Part of Sentence 3.4.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |   |
|---|---|
| <b>3.1.1.2. Radioactive Materials</b>               |   |
| (1)   | [F01,F02,F03,F81-OS1.1,OS1.2]               |
| <b>3.1.1.3. Explosives</b>                          |   |
| (1)   | [F01,F02,F03,F81-OS1.1,OS1.2]               |
| <b>3.1.1.4. Compressed Gases</b>                    |   |
| (2)   | [F01,F02,F03,F81-OS1.1,OS1.2]               |
| (3)   | [F01,F02,F03,F81-OS1.1,OS1.2]               |
| <b>3.1.2.2. Ambient Temperature</b>                 |   |
| (1)   | [F51-OS1.1]                                 |
| (2)   | [F51-OS1.1]                                 |
| (3)   | [F51-OS1.1]                                 |
| <b>3.1.2.3. Packages and Containers</b>             |   |
| (1)   | [F20,F43,F80,F81-OH5]                       |
|   | [F20,F43,F80,F81-OS3.4]                     |
|   | [F20,F43,F80,F81,F01-OS1.1]                 |
| (2)   | [F20,F43,F80,F81-OH5]                       |
|   | [F20,F43,F80,F81-OS3.4]                     |
|   | [F20,F43,F80,F81,F01-OS1.1]                 |
| <b>3.1.2.4. Storage Arrangement and Conditions</b>  |   |
| (1)   | [F01,F43-OS1.1]                             |
|   | [F43-OS3.4] <a href="#">[F10,F30-OS3.7]</a> |
|   | [F01,F43-OP1.1]                             |
|   | [F43-OH5]                                   |
| (2)   | (a) <a href="#">[F43-OS3.4]</a>             |
|   | (a) [F43-OH5]                               |
|   | (b) [F01, <a href="#">F43</a> -OS1.1]       |
|   | (b) [F01, <a href="#">F43</a> -OP1.1]       |
| <b>3.1.2.5. Compressed Gases</b>                    |   |
| (1)   | [F81-OS3.4]                                 |
|   | [F81-OS1.1]                                 |
| (2)   | [F81-OS3.4]                                 |
|   | [F81-OS1.1]                                 |
| (3)   | [F81,F22-OS3.4]                             |
|   | [F22,F81-OS1.1]                             |
| (4)   | [F05-OS1.5]                                 |

**Table 4.12.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4**  
 Forming Part of Sentence 4.12.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |  |
|---|--|
| <b>4.2.2.1. Prohibited Locations</b>                |  |
| (1)   | [F10,F12,F05,F06-OS1.5] Applies to storage in or adjacent to exits or principal routes that provide access to exits. |
|   | [F03-OS1.2] Applies to storage near elevators.   |
| <b>4.2.2.2. Storage Arrangement and Conditions</b>  |  |
| (1)   | [F01,F43-OS1.1]  |
|   | [F43-OS3.4] [F10,F30-OS3.7]  |
|   | [F01,F43-OP1.1]  |
|   | [F43-OH5]  |
| (2)   | (a) [F43-OS3.4]  |
|   | (a) [F43-OH5]  |
|   | (b) [F01,F43-OS1.1]  |
|   | (b) [F01,F43-OP1.1]  |
| <b>4.2.3.1. Design and Construction</b>             |  |
| (1)   | [F20,F43,F80,F81-OH5]  |
|   | (d) [F01,F43,F04-OS1.1]  |
|   | [F20,F43,F80,F81,F01-OS1.1]  |
| <b>4.2.3.2. Markings or Labels</b>                  |  |
| (1)   | [F81-OS1.1] [F12-OS1.1,OS1.2]  |
| (2)   | [F81-OS1.1] [F12-OS1.1,OS1.2]  |
| <b>4.2.4.2. Maximum Quantities</b>                  |  |
| (2)   | [F02-OS1.2]  |
|   | [F02-OP1.2]  |
| (3)   | [F02-OS1.2]  |
|   | [F02-OP1.2]  |
| (4)   | (b) [F03-OS1.2]  |
|   | (a) [F02-OS1.2]  |
|   | [F02,F03-OS1.2]  |
|   | (a) [F02-OP1.2] Applies to storage in cabinets not exceeding the quantity permitted for one cabinet.                 |
|   | [F02,F03-OP1.2]  |
| <b>4.2.4.3. Storage Cabinets and Storage Rooms</b>  |  |
| (1)   | [F12-OS1.2] [F01-OS1.1]  |
|   | [F12-OP1.2] [F01-OP1.1]  |
| <b>4.2.4.4. Exterior Balconies</b>                  |  |
| (1)   | [F03-OS1.2]  |
|   | [F03-OP1.2]  |
| <b>4.2.4.5. Dwelling Units</b>                      |  |

**Table 4.12.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4**  
 Forming Part of Sentence 4.12.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |  |
|---|--|
| (2)   | [F02-OS1.2]  |
|   | [F02-OP1.2]  |
| (3)   | [F02-OS1.2]  |
|   | [F02-OP1.2]  |
| <b>4.2.10.4. Labelling</b>                          |  |
| (1)   | [F01-OS1.1]  |
| <b>4.2.10.5. Fire Endurance</b>                     |  |
| (1)   | [F01-OS1.1]  |
|   | [F44-OS1.1]  |
|   | [F03-OS1.2]  |
|   | [F03-OP1.2]  |
|   | [F44-OP1.1]  |
|   | [F44-OH5]  |
| <b>4.2.10.6. Ventilation</b>                        |  |
| (1)   | (a) [F01-OS1.1,OS1.2] Applies to materials providing equivalent fire protection.<br>(b) [F01-OS1.1,OS1.2] Applies to the vent piping providing equivalent fire protection.                             |
|   | (a) [F01-OS1.1] Applies to portion of Code text: "... the ventilation openings shall be sealed ..."<br>(b) [F01-OS1.1] Applies to portion of Code text: "... the cabinet shall be vented outdoors ..." |
| <b>4.2.11.1. Quantities and Clearances</b>          |  |
| (1)   | [F03,F02-OS1.2]  |
|   | [F03,F02-OP3.1]  |
| (2)   | (a),(b) [F03,F02-OS1.2]  |
|   | (a),(b) [F03,F02-OP3.1]  |
| <b>4.2.11.3. Fire Department Access</b>             |  |
| (1)   | [F12-OP3.1]  |
| <b>4.2.12.2. Maximum Quantities</b>                 |  |
| (1)   | [F02-OS1.2]  |
|   | [F02-OP1.2]  |
| <b>4.2.12.3. Dispensing and Handling</b>            |  |
| (1)   | [F01,F43-OS1.1]  |
|   | [F01,F43-OP1.1]  |
| <b>4.3.1.2. Atmospheric Storage Tanks</b>           |  |
| (1)   | [F20,F80,F43,F81,F01-OS1.1]  |
|   | [F20,F80,F43,F81-OH5]  |
| (2)   | (b) [F04,F81-OS1.1]  |
| (4)   | [F01,F20,F81-OS1.1]  |
|   | [F20,F81-OH5]  |

**Table 4.12.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4**  
 Forming Part of Sentence 4.12.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |  |
|---|--|
| <b>4.5.2.1. Materials</b>                           |  |
| (1)   | [F20-OS1.1] This applies to the suitability of materials for the maximum anticipated working pressures and operating temperatures. |
|   | [F20-OH5] This applies to the suitability of materials for the maximum anticipated working pressures and operating temperatures.   |
|   | [F80-OS1.1] Applies to the suitability of materials for the chemical properties of the contained liquid.                           |
|   | [F80-OH5] Applies to the suitability of materials for the chemical properties of the contained liquid.                             |
|   | [F20-OP1.1] This applies to the suitability of materials for the maximum anticipated working pressures and operating temperatures. |
|   | [F80-OP1.1] Applies to the suitability of materials for the chemical properties of the contained liquid.                           |
| (2)   | (a) [F20-OS1.1]  |
|   | (a) [F20-OH5]  |
|   | (b) [F04-OS1.1]  |
|   | (b) [F04-OH5]  |
|   | (a) [F20-OP1.1]  |
|   | (b) [F04-OP1.1]  |
| (3)   | [F20,F80-OS1.1]  |
|   | [F20,F80-OP1.1]  |
|   | [F20,F80-OH5]  |
| (4)   | [F20,F80-OS1.1]  |
|   | [F20,F80-OH5]  |
|   | [F20,F80-OP1.1]  |
| (5)   | [F20,F43,F80,F81-OS1.1]  |
|   | [F20,F43,F80,F81-OP1.1]  |
|   | [F20,F43,F80,F81-OH5]  |
| (6)   | [F20,F43,F80,F81-OS1.1]  |
|   | [F20,F43,F80,F81-OP1.1]  |
|   | [F20,F43,F80,F81-OH5]  |
| <b>4.5.2.2. Special Materials</b>                   |  |
| (1)   | [F80,F81,F20-OS1.1]  |
|   | [F80,F81,F20-OP1.1]  |
|   | [F80,F81,F20-OH5]  |
| <b>4.5.3.1. Corrosion Protection</b>                |  |
| (1)   | [F80-OP1.1]  |
|   | [F80-OS1.1]  |
|   | [F80-OH5]  |
| <b>4.5.4.1. Identification</b>                      |  |
| (1)   | [F81-OS1.1] [F12-OS1.2]  |
| (2)   | [F81-OS1.1]  |
|   | [F81-OH5]  |

**Table 4.12.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4**  
 Forming Part of Sentence 4.12.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |   |
|---|---|
| <b>4.6.2.2. Containers</b>                          |   |
| (1)   | [F81,F12-OS1.1] [F12-OS1.2] Applies to the requirement for products stored or sold at fuel-dispensing stations to be in closed containers distinctly marked with the generic name of the liquid they contain. |
| <b>4.6.2.3. Piping</b>                              |   |
| (4)   | [F20,F22-OS1.1] <u>Applies to the supported portion of the piping.</u>  |
|   | [F20,F21,F81-OS1.1] <u>Applies to the backfilled portion of the piping.</u>   |
|   | [F20,F22-OP1.1] <u>Applies to the supported portion of the piping.</u>  |
|   | [F20,F21,F81-OP1.1] <u>Applies to the backfilled portion of the piping.</u>   |
|   | [F20,F22-OH5] <u>Applies to the supported portion of the piping.</u>  |
|   | [F20,F21,F81-OH5] <u>Applies to the backfilled portion of the piping.</u>   |
| <b>4.6.2.5. Piping Supports and Guards</b>          |   |
| (1)   | [F81,F22-OS1.1]   |
|   | [F81,F22-OH5]   |
|   | [F81,F22-OP1.1]   |
| <b>4.6.3.1. Dispensers</b>                          |   |
| (1)   | [F01,F43-OS1.1]   |
|   | [F43-OH5]   |
| <b>4.6.3.2. Dispenser Sumps</b>                     |   |
| (1)   | [F01,F20,F44,F80,F81-OS1.1]   |
|   | [F20,F44,F80,F81-OS3.4]   |
|   | [F01,F20,F44,F80,F81-OP1.1]   |
|   | [F20,F44,F80,F81-OH5]   |
| <b>4.6.3.3. Location</b>                            |   |
| (1)   | (f) [F43,F01-OS1.1]   |
|   | (f) [F01-OS1.1] Applies to the minimum distance from any building opening.  |
|   | (a) [F01-OP3.1]   |
|   | (b),(c) [F01,F81-OS1.1]   |
|   | (d) [F01-OS1.1]   |
|   | (f) [F01-OS1.1] Applies to location with respect to openings in buildings for the shelter of operating personnel and in which there are electrical installations.   |
| (2)   | (a) [F34-OS1.1]   |
|   | (b) [F12,F01-OS1.1]   |
|   | (d) [F01-OS1.1] Applies to portion of Code text: "...ventilation is provided in conformance ... with the requirements for storage garages in Part 6 of the British Columbia Building Code."                   |
|   | (d) [F40-OS3.4] Applies to portion of Code text: "... ventilation is provided in conformance ... with the requirements for storage garages in Part 6 of the British Columbia Building Code."                  |
| (3)   | [F01,F43-OS1.1]   |
| <b>4.6.3.4. Protection against Collision Damage</b> |   |

**Table 4.12.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 4**  
 Forming Part of Sentence 4.12.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |   |
|---|---|
| (1)   | [F81-OS1.1]   |
|   | [F81-OH5]   |
| <b>4.6.3.5. Marine Fuel-Dispensing Stations</b>     |   |
| (1)   | [F81-OS1.1]   |
|   | [F81-OH5]   |
| <b>4.6.4.1. Location and Identification</b>         |   |
| (1)   | [F44-OS1.1] Applies to the requirement to provide shut-off devices to all dispensers and pumps.<br>[F06-OS1.1] Applies to the location and shielding of the shut-off devices. |
|   | [F44-OH5] Applies to the requirement to provide shut-off devices to all dispensers and pumps.<br>[F06-OH5] Applies to the location and shielding of the shut-off devices.     |
|   | [F44-OP1.1] Applies to the requirement to provide shut-off devices to all dispensers and pumps.<br>[F06-OP1.1] Applies to the location and shielding of the shut-off devices. |
| (2)   | [F12-OS1.1,OS1.2]   |
|   | [F12-OP1.1,OP1.2]   |
|   | [F12-OH5]   |
| (3)   | [F12,F44-OS1.1] Applies to the requirement for shut-off valves.   |
|   | [F04,F20-OP1.1] Applies to the requirement for steel shut-off valves.   |
|   | [F12,F44-OH5] Applies to the requirement for shut-off valves.   |
|   | [F12,F44-OP1.1] Applies to the requirement for shut-off valves.   |
|   | [F04,F20-OS1.1] Applies to the requirement for steel shut-off valves.   |
|   | [F04,F20-OH5] Applies to the requirement for steel shut-off valves.   |
| <b>4.6.4.2. Self-service Outlets</b>                |   |
| (1)   | [F12,F44-OS1.1,OS1.2]   |
|   | [F12,F44-OP1.1,OP1.2]   |
|   | [F12,F44-OH5]   |
| (2)   | [F12-OS1.1,OS1.2]   |
|   | [F12-OP1.1,OP1.2]   |
|   | [F12-OH5]   |
| <b>4.6.4.3. Marine Fuel-Dispensing Stations</b>     |   |
| (1)   | [F12-OS1.1]   |
|   | [F12-OH5]   |
|   | [F12-OP1.1]   |
| <b>4.6.5.1. Delivery Hose</b>                       |   |
| (1)   | [F81,F20,F43,F01-OS1.1]   |
|   | [F81,F20,F43-OP1.1]   |
|   | [F81,F20,F43-OH5]   |

- c) a final inspection of the hot work area and adjacent exposed areas shall be conducted
  - i) 4 h after completion of the work, or
  - ii) after completion of the fire watch required in Clause (b), in which case, a more comprehensive inspection shall be conducted (see Note A-5.2.3.1.(2)(c)(ii)).
- 3)** When there is a possibility of sparks or open flames reaching combustible materials in areas adjacent to the area where hot work is carried out,
  - a) openings in walls, floors or ceilings shall be covered or closed to prevent the passage of sparks or open flames to such adjacent areas, or
  - b) Sentence (2) shall apply to such adjacent areas.

#### 5.2.3.2. Protection of Combustible and Flammable Materials

- 1)** Any combustible and flammable material, dust or residue shall be
  - a) removed from the area where hot work is carried out, or
  - b) ~~except as provided in Sentence (2),~~ protected against ignition by the use of noncombustible materials.
- 2)** Combustible materials or *building* surfaces that cannot be removed or protected against ignition as required in Clause (1)(b) shall be thoroughly wetted where hot work is carried out.
- 3)** The fire watch described in Clauses 5.2.3.1.(2)(b) and (c) shall be carried out by more than one person if combustible materials are exposed to the hot work operations but cannot be directly observed by the initial person performing the fire watch.
- 4)** Any process or activity that produces flammable gases or vapours, *combustible dusts* or *combustible fibres* in quantities sufficient to create a fire or explosion hazard shall be interrupted and the hazardous conditions shall be removed before any hot work is carried out.

#### 5.2.3.3. Fire Watch

- 1)** The exposed areas described in Sentences 5.2.3.1.(2) and (3) shall be continuously examined for ignition of combustible materials by personnel equipped with and trained in the use of fire extinguishing equipment. (See Note A-5.2.3.3.(1).)

#### 5.2.3.4. Work on Containers, Equipment or Piping

- 1)** Hot work shall not be performed on containers, equipment, or piping containing *flammable liquids, combustible liquids* or *dangerous goods* classified as flammable gases unless
  - a) they have been cleaned and tested with a gas detector to ascertain that they are free of explosive vapours, or
  - b) safety measures are taken in conformance with good engineering practice (see Note A-5.2.3.4.(1)(b)).
- 2)** Hot work shall not be performed on a totally enclosed container.
- 3)** Hot work shall not be performed on metal objects that are in contact with combustible materials unless safety precautions are taken to prevent their ignition by conduction.

#### 5.2.3.5. Work Adjacent to Piping

- 1)** When hot work is to be carried out near piping containing *dangerous goods* classified as flammable gases, the piping shall
  - a) conform to Sentence 5.2.3.4.(1), or
  - b) be protected by a thermal barrier against the passage of heat.

#### 5.2.3.6. Fire Extinguishing Equipment

- 1)** At least one portable fire extinguisher shall be provided in the hot work area.

#### 5.2.3.7. Fire Safety Plan

- 1)** In *buildings* or areas described in Article 2.8.1.1., the required fire safety plan shall include the safety measures described in this Subsection for the safe conducting of hot works.

## Section 5.3. Dust-Producing Processes

### 5.3.1. General

#### 5.3.1.1. Application

**1)** This Section shall apply to *buildings* or parts of *buildings* where *combustible dusts* are produced in quantities or concentrations that create an explosion or fire hazard.

#### 5.3.1.2. Dust Removal

**1)** *Building and machinery surfaces shall be kept clean of accumulations of combustible dusts* using cleaning equipment that

- a) is made of materials that will not create electrostatic charges or sparks,
- b) is electrically conductive and bonded to ground, and
- c) except as permitted in Sentence (3), removes the dust to a safe location by vacuum.

**2)** Cleaning equipment required in Sentence (1) that is used in an atmosphere containing *combustible dusts* shall conform to the British Columbia Electrical Safety Regulation.

**3)** Where it is not possible to effectively remove the dust by vacuum, it is permitted to use compressed air or other means that will cause the dust to become suspended in the air during removal if, in the dust removal area,

- a) all sources of ignition are eliminated, and
- b) all machinery and equipment is de-energized, unless such machinery or equipment is suitable for use in atmospheres containing *combustible dusts*, in conformance with the British Columbia Electrical Safety Regulation.

#### 5.3.1.3. Dust-Collecting Systems

**1)** Dust-collecting systems shall be provided to prevent the accumulation of dust and keep suspended dusts at a safe concentration inside a *building*.

**2)** A dust-collecting system required in Sentence (1) shall

- a) be designed in conformance with good engineering practice,
- b) be made of noncombustible materials, and
- c) not create sparks upon physical contact in the fan assembly.

(See Note A-5.3.1.3.(2).)

#### 5.3.1.4. Dust Collectors

**1)** Except as provided in Sentence (2), a dust collector having a capacity greater than 2.36 m<sup>3</sup>/s shall

- a) be located outside of a *building*, and
- b) be equipped with explosion venting to the outdoors of not less than 0.1 m<sup>2</sup> of vent area for each cubic metre of dust collector enclosure volume.

**2)** A dust collector described in Sentence (1) is permitted to be located inside a *building* if it is

- a) provided with explosion venting to the outdoors as specified in Clause (1)(b),
- b) equipped with an automatic explosion prevention system, or
- c) located in a room with *fire separations* having a *fire-resistance rating* of not less than 1 h and provided with explosion venting to the outdoors.

**3)** When air exhausted by a dust collector described in this Article is returned to a *building*, the dust-collecting system shall be designed so that

- a) returned air will not create an explosion hazard inside the *building*, and
- b) the exhaust fan and ancillary equipment are automatically shut down in the event of a fire or an explosion inside the dust collector.

- 3)** Containers used for the preservation of animal, human or plant specimens that contain *flammable liquids* or *combustible liquids* shall
  - a) be properly sized for the specimens,
  - b) be stored in a room conforming to Subsection 4.2.9., and
  - c) be protected against breakage and spillage.
- 4)** Containers of *flammable liquids* or *combustible liquids* shall be kept closed when not in use.

#### 5.5.5.3. Compressed Gases

- 1)** Cylinders of *dangerous goods* classified as compressed gases shall not be located in laboratories unless they are
  - a) in use and connected
    - i) to a regulator to deliver gas, or
    - ii) to a manifold being used to deliver gas, or
  - b) one is serving as a single reserve cylinder for a cylinder described in Subclause (a)(i) to which it is firmly secured with a noncombustible attachment.
- 2)** Storage cylinders and piping systems for *dangerous goods* classified as compressed gases used in a laboratory shall be firmly secured with a noncombustible attachment and protected against mechanical damage.
- 3)** Each point of supply and each point of use of cylinders or piping systems for *dangerous goods* classified as compressed gases shall be provided with
  - a) labels identifying the gas being supplied, and
  - b) a manual shut-off valve.
- 4)** Valves on cylinders for *dangerous goods* classified as compressed gases shall be closed when not in use.
- 5)** Except as provided in Sentence (7), where cylinders of *dangerous goods* classified as toxic gases are used in a laboratory,
  - a) they shall be located in a continuously mechanically ventilated gas storage cabinet,
  - b) all exhaust shall be directed to a treatment system designed to process the accidental release of gas (see Note A-5.5.5.3.(5)(b) and (7)(b)), and
  - c) the gas levels in the air shall be monitored by a gas detection system designed to emit an audible and visual signal within the laboratory and at a central station when gas levels exceed the exposure limit values established by provincial regulations or, in the absence of such regulations, when they exceed the exposure limit values stated in the Safety Data Sheet.
- 6)** Except as permitted in Sentence (7), cylinders of *dangerous goods* classified as compressed gases of pyrophoric materials shall be located in a gas storage cabinet that is
  - a) continuously mechanically ventilated, and
  - b) *sprinklered*.
- 7)** Where lecture bottles of *dangerous goods* classified as toxic gases or as compressed gases of pyrophoric materials are used in a laboratory,
  - a) they shall be kept in a dedicated continuously mechanically ventilated hood or other continuously mechanically ventilated enclosure, and
  - b) all exhaust shall be directed to a treatment system designed to process the accidental release of gas (see Note A-5.5.5.3.(5)(b) and (7)(b)).

#### 5.5.5.4. Refrigerated Storage

- 1)** Refrigerators described in Sentence 4.1.4.1.(2) shall be identified in conformance with Article 3.2.7.14.
- 2)** Class I liquids that are stored in refrigerators shall be kept in *closed containers*.

### 5.6.3. Additional Requirements for Residential and Business and Personal Services Occupancies

#### 5.6.3.1. Application

**1)** This Subsection applies only to *buildings or parts of buildings* conforming to Articles 3.2.2.48EMTC., 3.2.2.50., 3.2.2.57EMTC., and 3.2.2.58. of Division B of the British Columbia Building Code.

#### 5.6.3.2. Smoking Restrictions

**1)** Where smoking is permitted on a construction, alteration, or demolition site, it shall only be permitted in designated smoking areas, which shall

- be located not less than 3 m away from the *building* or part of the *building* under construction, demolition, or alteration,
- be identified with appropriate signage,
- be provided with safe receptacles for the disposal of smoking materials, and
- have a clearance of not less than 3 m from any combustible storage or combustible refuse maintained at all times.

(See Note A-5.6.3.2.(1).)

#### 5.6.3.3. Site Identification

**1)** A sign identifying the civic address of the construction or demolition site shall be visible from the access route at the entrance to the site at all times.

**2)** A sign identifying the floor level, stair location and civic address shall be posted at each floor in a stairway required by Sentence 5.6.3.7.(1).

#### 5.6.3.4. Disposal of Combustible Refuse

**1)** For *buildings* or parts of *buildings* conforming to Article 3.2.2.50. or 3.2.2.58. of Division B of the British Columbia Building Code, a clearance of not less than 3 m shall be maintained between containers used for the disposal of combustible refuse and *exits*.

**2)** For *buildings* or parts of *buildings* conforming to Article 3.2.2.48EMTC. or 3.2.2.57EMTC. of Division B of the British Columbia Building Code, a clearance of not less than 3 m between *exits* or any portion of the *building* and containers used for the disposal of combustible refuse shall be maintained, or equivalent protection shall be provided as specified in the fire safety plan.

**3)** Disposal chutes described in Clause 8.2.5.2.(1)(b) of Division B of the British Columbia Building Code shall

- be constructed of noncombustible material, or
- terminate not less than 2 m above the disposal bin they serve.

#### 5.6.3.5. Water Supply

**1)** An adequate water supply for firefighting shall be provided as soon as *combustible construction or encapsulated mass timber construction* material arrives on the site. (See Note A-5.6.3.5.(1).) (See also Note A-3.2.5.7.(1) of Division B of the British Columbia Building Code.)

#### 5.6.3.6. Hydrant Access

**1)** Hydrants on a construction, alteration, or demolition site shall

- be clearly marked with a sign,
- be accessible, and
- have an unobstructed clearance of not less than 2 m at all times.

### 5.6.3.7. Construction Access

- 1)** For buildings or parts of buildings conforming to Article 3.2.2.50. or 3.2.2.58. of Division B of the British Columbia Building Code, during construction and in addition to the means of access required by Sentences 5.6.1.4.(2) and (3), at least one stairway shall be provided that
- consists of treads and risers complying with the dimensional requirements of Article 3.4.6.8. of Division B of the British Columbia Building Code,
  - is equipped with one handrail conforming to Sentences 3.4.6.5.(5), (6), (7), (11), (13), and (14) of Division B of the British Columbia Building Code,
  - is not less than 900 mm wide, and
  - is equipped with guards that are
    - not less than 920 mm high when measured vertically to the top of the guard from a line drawn through the outside edges of the stair nosings, and
    - not less than 1070 mm high around landings.
- 2)** At least one stairway conforming to Sentence (1) shall be
- extended upward as each floor is installed in new construction, or
  - maintained for each floor still remaining during demolition.
- 3)** For buildings or parts of buildings conforming to Article 3.2.2.48EMTC. or 3.2.2.57EMTC. of Division B of the British Columbia Building Code, during construction, in addition to the requirements of Sentences 5.6.1.4.(2) and (3), at least two stairways complying with Clauses (1)(a) to (d), Clauses (2)(a) and (b), and Sentence (4) shall be provided.  
(See Note A-5.6.3.7.(3).)
- 4)** Stairways referred to in Sentence (3)
- shall be separated from the remainder of the storey by a wall assembly have a fire-resistance rating not less than 30 min, and
  - shall have doorways that are provided with
    - 45 mm solid core wood doors,
    - hollow metal doors,
    - doors constructed of not less than 12.7 mm thick gypsum board mechanically fastened to not less than 12.7 mm thick plywood with the gypsum board facing the floor area, or
    - door assemblies having a fire-protection rating not less than 20 min.
- (See Note A-5.6.3.7.(3).)
- 5)** Doors for stairways described in Clause (4)(b) shall
- swing on the vertical axis, and
  - be equipped with
    - latches, and
    - a means to close automatically.
- (See Note A-5.6.3.7.(3).)

### 5.6.3.8. Site Security

(See also Article 8.2.1.3. of Division B of the British Columbia Building Code.)

- 1)** A strongly constructed fence, boarding or barricade not less than 1.8 m high shall be erected around the perimeter of the construction or demolition site.
- 2)** Barricades shall have
- a reasonably smooth surface facing the outside, and
  - no openings other than those required for access.
- 3)** Access openings through barricades shall be equipped with gates, which shall be
- kept closed and locked when the site is unattended, and

- b) maintained in place until completion of the construction or demolition activity.
- 4) Fencing, boarding and barricades shall be constructed and maintained in a manner that does not restrict access to the construction or demolition site for firefighting purposes or to fire protection equipment.

#### 5.6.4. Additional Requirements for Buildings of Encapsulated Mass Timber Construction

##### 5.6.4.1. Application

- 1) This Subsection applies only to buildings or parts of buildings conforming to Articles 3.2.2.48EMTC. or 3.2.2.57EMTC. of Division B of the British Columbia Building Code that are under construction.

##### 5.6.4.2. Standpipe Installation

- 1) For each new level at which hose valves are installed, the standpipe system shall be subjected to
  - a) a pneumatic test at 275 kPa for not less than 24 h, or
  - b) a hydrostatic test at 1 380 kPa for not less than 2 h.
- 2) The standpipe system shall be corrected and re-tested if the drop in pressure
  - a) when tested in accordance with Clause (1)(a), is in excess of 21 kPa, or
  - b) when tested in accordance with Clause (1)(b), is in excess of 35 kPa.
- 3) Where a standpipe system is maintained dry,
  - a) after each test or re-test carried out in accordance with Sentence (1), it shall be provided with supervisory air not greater than 172 kPa and not less than 35 kPa,
  - b) each fire department connection shall be provided with
    - i) an audible warning system that sounds when the supervisory air is less than 35 kPa, or
    - ii) an air pressure gauge indicating the supervisory air pressure,
  - c) a manual air release with one or more valves of a minimum 30 mm diameter shall be provided immediately adjacent to each fire department connection such that the air pressure from a pneumatic test is released in not more than 3 min,
  - d) each fire department connection shall be provided with signage
    - i) indicating that the dry standpipe system is pressurized with air, and
    - ii) showing the location of the manual air release, and
  - e) provisions shall be made to drain water in any trapped sections of the dry standpipe system that are subject to freezing.
- 4) Where a standpipe system is maintained wet, each fire department connection shall be provided with a water pressure gauge.
- 5) The standpipe system, whether a temporary system or a permanent system being installed progressively, shall be in operable condition at all times when it is not actively being worked on, until the permanent standpipe system is completed.

##### 5.6.4.3. Protective Encapsulation

- 1) Except as provided in Sentences (2) and (3), to address safety during construction, a protective encapsulation material or an assembly of materials providing an encapsulation rating of not less than 25 min, as determined in accordance with Sentence 3.1.19.1.(1) of Division B of the British Columbia Building Code, shall be installed
  - a) such that not more than 20% of the area of the underside of each mass timber floor assembly on each storey is exposed during construction,
  - b) on the interior side of stairways required by Sentence 5.6.3.7.(3) and of vertical service spaces where the enclosures are constructed of mass timber elements,
  - c) on each face of solid lumber or mass timber partitions not less than 38 mm thick and of partitions containing wood framing as permitted by Article 3.1.18.13. of Division B of the British Columbia Building Code, and

- d) such that not more than 35% of the total area of structural mass timber walls within the storey is exposed during construction.

(See Note A-5.6.4.3.(1).)

**2)** Not more than the four uppermost contiguous storeys are permitted to be unprotected as required by Sentence (1) during construction.

**3)** The encapsulation material or assembly of materials used to meet the requirements of Sentence (1) is permitted to consist of a single layer of Type X gypsum board not less than 12.7 mm thick conforming to Clauses 3.1.19.2.(2)(a), (d), and (e) of Division B of the British Columbia Building Code.

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
 Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup>               |   |
|---|---|
| <b>5.2.3.1. Location of Operations</b>                            |   |
| (1)   | [F01-OS1.1]   |
| (2)   | (c) [F01-OS1.1] [F02-OS1.2]   |
|   | (c) [F01-OP1.1] [F02-OP1.2]   |
| (3)   | (a) [F01-OS1.1]   |
| <b>5.2.3.2. Protection of Combustible and Flammable Materials</b> |   |
| (1)   | [F01-OS1.1]   |
| (2)   | [F01-OS1.1]   |
| (3)   | [F01-OS1.1] [F02-OS1.2]   |
|   | [F01-OP1.1] [F02-OP1.2]   |
| (4)   | [F01-OS1.1]   |
| <b>5.2.3.3. Fire Watch</b>  |   |
| (1)   | [F01-OS1.1] [F02-OS1.2]   |
|   | [F01-OP1.1] [F02-OP1.2]   |
| <b>5.2.3.4. Work on Containers, Equipment or Piping</b>           |   |
| (1)   | [F01-OS1.1] Applies to the restriction of hot works.  |
| (2)   | [F81,F20-OS3.1]   |
| (3)   | [F01-OS1.1] Applies to portion of Code text: "Hot work shall not be performed on metal objects that are in contact with combustible materials unless ..." |
| <b>5.2.3.5. Work Adjacent to Piping</b>                           |   |
| (1)   | (b) [F81-OS1.1]   |
| <b>5.2.3.6. Fire Extinguishing Equipment</b>                      |   |
| (1)   | [F02-OS1.2]   |
| <b>5.2.3.7. Fire Safety Plan</b>                                  |   |
| (1)   | [F01-OS1.1]   |
| <b>5.3.1.2. Dust Removal</b>                                      |   |
| (1)   | [F01-OS1.1]   |
| (2)   | [F01-OS1.1]   |
| (3)   | [F01-OS1.1]   |
| <b>5.3.1.3. Dust-Collecting Systems</b>                           |   |
| (2)   | (a) [F01-OS1.1]   |
|   | (a) [F01-OP1.1]   |
|   | (b) [F02-OS1.2]   |
|   | (b) [F02-OP1.2]   |
|   | (c) [F01-OS1.1]   |
|   | (c) [F01-OP1.1]   |

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
 Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |  |
|---|--|
| <b>5.3.1.4. Dust Collectors</b>                     |  |
| (1)   | [F02-OP1.2]  |
|   | [F02-OS1.2]  |
| (2)   | [F02,F03-OP1.2] [F01-OP1.1]  |
|   | [F02,F03-OS1.2] [F01-OS1.1]  |
| (3)   | (b) [F03-OS1.2]  |
|   | (b) [F03-OP1.2]  |
|   | [F01-OS1.1]  |
|   | [F01-OP1.1]  |
| <b>5.3.1.5. Bonding and Grounding</b>               |  |
| (1)   | [F01-OS1.1]  |
| (2)   | [F01-OS1.1]  |
| <b>5.3.1.6. Explosion Venting</b>                   |  |
| (1)   | [F02-OS1.3]  |
|   | [F02-OP1.3]  |
| (2)   | [F02-OP1.3]  |
|   | [F02-OS1.3]  |
| <b>5.3.1.7. Explosion Prevention Systems</b>        |  |
| (1)   | [F01-OS1.1]  |
| (2)   | [F01-OS1.1]  |
| <b>5.3.1.8. Electrical Interlocks</b>               |  |
| (1)   | [F01-OS1.1]  |
| <b>5.3.1.9. Separators</b>                          |  |
| (1)   | [F01-OS1.1]  |
| <b>5.3.1.10. Ignition Sources</b>                   |  |
| (1)   | [F01-OS1.1]  |
| (2)   | [F01-OS1.1]  |
| (3)   | [F01-OS1.1]  |
| <b>5.3.2.1. Exhaust Systems</b>                     |  |
| (1)   | [F02-OP1.2]  |
|   | [F01-OS1.1] [F02-OS1.2]  |
| (2)   | [F01-OS1.1]  |
| <b>5.3.2.2. Shavings and Sawdust Collection</b>     |  |
| (1)   | [F01-OS1.1] Applies to portion of Code text: "Loose shavings and sawdust shall be collected at frequent intervals ..." |
| <b>5.3.2.3. Fire Extinguishers</b>                  |  |
| (1)   | [F12-OS1.2]  |

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
 Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup>              |                                   |
|--|-----------------------------------|
| <b>5.5.5.2. Containers for Flammable and Combustible Liquids</b> |                                   |
| (2)  | [F02,F04-OS1.2] [F43,F01-OS1.1]   |
|  | [F02,F04-OP1.2] [F01,F43-OP1.1]   |
| (3)  | [F01,F43-OS1.1]                   |
|  | [F01,F43-OP1.1]                   |
| (4)  | [F43,F01-OS1.1]                   |
| <b>5.5.5.3. Compressed Gases</b>                                 |                                   |
| (1)  | [F02-OS1.2]                       |
|  | [F02-OP1.2]                       |
| (2)  | [F81-OS1.1]                       |
|  | [F81-OS3.4]                       |
| (3)  | (a) [F81-OS1.1] [F12-OS1.1,OS1.2] |
|  | (b) [F12-OS3.4]                   |
|  | (b) [F12-OP1.2]                   |
|  | (a) [F12-OP1.2]                   |
|  | (a) [F81,F12-OS3.4]               |
|  | (b) [F12-OS1.1,OS1.2]             |
| (4)  | [F43-OS1.1]                       |
|  | [F43-OS3.4]                       |
| (5)  | [F43-OS3.4]                       |
|  | [F43-OH5]                         |
|  | (b) [F11,F12,F13-OS3.4]           |
|  | (b) [F11,F12,F13-OH5]             |
| (6)  | [F01,F02-OS1.1,OS1.2]             |
|  | [F01,F02-OP1.1,OP1.2]             |
| (7)  | [F44-OS3.4]                       |
|  | [F44-OH5]                         |
|  | [F01-OS1.1]                       |
|  | [F01-OP1.1]                       |
| <b>5.5.5.4. Refrigerated Storage</b>                             |                                   |
| (2)  | [F01,F43-OS1.1]                   |
| <b>5.5.5.5. Dangerously Reactive Materials</b>                   |                                   |
| (1)  | (b) [F81-OS1.1]                   |
| (2)  | [F01-OS1.1] [F02-OS1.2]           |
|  | [F01-OP1.1] [F02-OP1.2]           |

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
 Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |                                 |
|---|---------------------------------|
| <b>5.6.1.14. Watch</b>                              |                                 |
| (1)   | [F02-OS1.2,OS1.5]               |
| (2)   | [F02-OS1.5,OS1.2]               |
| (3)   | [F13-OS1.5,OS1.2]               |
| <b>5.6.1.15. Smoking Restrictions</b>               |                                 |
| (1)   | [F01-OS1.1]                     |
| <b>5.6.1.16. Provision for Egress</b>               |                                 |
| (1)   | [F10,F82-OS3.7]                 |
| (2)   | [F10,F82-OS3.7]                 |
| <b>5.6.1.17. Fire Warning</b>                       |                                 |
| (1)   | [F11-OS1.5]                     |
| <b>5.6.1.19. Temporary Enclosures</b>               |                                 |
| (1)   | [F01-OS1.1,OS1.2]               |
| <b>5.6.1.20. Disposal of Combustible Refuse</b>     |                                 |
| (1)   | [F02-OS1.1,OS1.2]               |
|   | [F02-OP1.2]                     |
| <b>5.6.2.1. Services Shut-off</b>                   |                                 |
| (1)   | [F01,F43,F81-OS1.1,OS1.2]       |
|   | [F01,F43,F81-OP1.1,OP1.2]       |
|   | [F32-OS3.3]                     |
| (2)   | [F81-OS1.1,OS1.2]               |
|   | [F81-OP1.1,OP1.2]               |
| <b>5.6.2.2. Maintaining Existing Services</b>       |                                 |
| (1)   | [F81-OS1.1,OS1.2]               |
| <b>5.6.3.2. Smoking Restrictions</b>                |                                 |
| (1)   | [F01-OS1.1]                     |
|   | [F01-OP1.1]                     |
|   | (a),(d) [F01,F03-OS1.1,OS1.2]   |
|   | (a),(d) [F01,F03-OP1.1,OP1.2]   |
| <b>5.6.3.3. Site Identification</b>                 |                                 |
| (1)   | [F12-OS1.2]                     |
|   | [F12-OP1.2]                     |
| (2)   | [F12-OP3.1]                     |
| <b>5.6.3.4. Disposal of Combustible Refuse</b>      |                                 |
| (1)   | [F03,F12-OS1.2] [F05,F10-OS1.5] |
| (2)   | [F03,F12-OS1.2] [F05,F10-OS1.5] |

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
 Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |                                 |
|---|---------------------------------|
| (3)   | [F01,F03-OS1.2]                 |
|   | [F01,F03-OP1.2]                 |
| <b>5.6.3.5. Water Supply</b>                        |                                 |
| (1)   | [F02-OP3.1]                     |
|   | [F02-OP1.2]                     |
|   | [F02-OS1.2]                     |
| <b>5.6.3.6. Hydrant Access</b>                      |                                 |
| (1)   | [F02-OP3.1]                     |
|   | [F02-OP1.2]                     |
|   | [F02-OS1.2]                     |
| <b>5.6.3.7. Construction Access</b>                 |                                 |
| (1)   | [F10,F12-OS1.2] [F02-OS1.5]     |
|   | [F30-OS3.1]                     |
|   | [F02,F12-OP1.2]                 |
| (2)   | [F10,F12-OS1.2] [F02,F12-OS1.5] |
|   | [F02,F12-OP1.2]                 |
| (3)   | [F10,F12-OS1.2]                 |
| (4)   | [F12-OS1.2] [F10-OS1.5]         |
|   | [F02-OP3.1]                     |
| (5)   | [F12-OS1.2] [F10-OS1.5]         |
|   | [F02-OP3.1]                     |
| <b>5.6.3.8. Site Security</b>                       |                                 |
| (1)   | [F34-OS1.1,OS1.2]               |
| (2)   | [F34-OS1.1,OS1.2]               |
| (3)   | [F34-OS1.1,OS1.2]               |
| (4)   | [F12-OS1.1,OS1.2]               |
| <b>5.6.4.2. Standpipe Installation</b>              |                                 |
| (1)   | [F02, F12-OS1.2]                |
|   | [F02, F12-OP1.2]                |
| (2)   | [F02, F12-OS1.2]                |
|   | [F02, F12-OP1.2]                |
| (3)   | [F02, F12-OS1.2]                |
|   | [F02, F12-OP1.2]                |
| (4)   | [F02, F12-OS1.2]                |
|   | [F02, F12-OP1.2]                |
| <b>5.6.4.3. Protective Encapsulation</b>            |                                 |

**Table 5.7.1.1. (continued)**  
**Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 5**  
Forming Part of Sentence 5.7.1.1.(1)

| Functional Statements and Objectives <sup>(1)</sup> |             |
|---|-------------|
| (1)   | [F02-OS1.2] |
|   | [F02-OP1.2] |
|   | [F02-OP3.1] |

**Notes to Table 5.7.1.1.:**

(1) See Parts 2 and 3 of Division A.

**A-5.6.1.4.(4)** The fire safety plan for the construction or demolition site of buildings conforming to Article 3.2.2.50. or 3.2.2.58. of Division B of the BCBC should take into consideration the design of the access route to the building under construction as well as the elevation of the access route relative to the uppermost floor level to facilitate firefighter access to the roof. (See Sentence 3.2.5.6.(2) of Division B of the BCBC.)

**A-5.6.1.5.(2)(a)** Moveable equipment includes, but is not limited to, cutting and welding equipment.

**A-5.6.1.6.** Not all aspects of Subsection 3.2.5. of Division B of the BCBC are applicable to unoccupied areas of buildings, parts of buildings, facilities and associated areas undergoing construction, alteration or demolition operations.

When the temperature causes freezing conditions, the standpipe should be drained to prevent damage to the equipment. It is not expected that hoses and nozzles be made available in the building undergoing construction, alteration or demolition operations, as they will be brought to the relevant floor by the responding fire department.

**A-5.6.1.8.** Minimum clearances shown on certified heating equipment or as described in Part 6 of Division B of the BCBC should be provided between combustible materials and temporary heating equipment, including flues such as exhaust discharges from internal combustion engines.

**A-5.6.1.9.(1)** A safe area for the location of terminated building services, such as gas and fuel lines, electrical lines, and water and steam piping, is in an area away from the building or part thereof that is safe enough so as not to cause damage to the building or part thereof in the event of their accidental breakage. In some cases, terminated services can be located directly outside the building or part thereof if adequate protection is provided, and in others, they can be located at the property line and/or service connection.

**A-5.6.1.11.(4)** Guidance on methods of rendering inert tanks, piping and machinery reservoirs is available in NFPA 326, “Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair.”

**A-5.6.3.2.(1)** Note that the intent of Sentence 5.6.3.2.(1) in relation to the alteration of a floor, suite or room in an existing building is not to prevent smoking elsewhere in the building where smoking would normally be permitted.

**A-5.6.3.5.(1)** The water supply referred to in Sentence 5.6.3.5.(1) may be either natural or developed, and need not be the final water supply for the finished building.

**A-5.6.3.7.(3)** It is recognized that, during construction of the building, one stairway might be out of service at any given time to allow the further construction of the stairway or to accommodate other construction activities. However, this out-of-service period should be kept as short as possible to ensure that workers have two options for evacuation and that emergency responders have two means of access to each floor.

Note that the stairways required by Sentence 5.6.3.7.(3) could be temporary ones, which would, nevertheless, still need to be separated from the remainder of the storey by an assembly that will provide protection from fire for a minimum of 30 min. Furthermore, doors must be operable but should be kept in the closed position at all times, unless they need to be kept open temporarily for operational reasons. Fusible-links or other acceptable means can be used to ensure that doors close automatically.

**A-5.6.4.3.(1)** The extent to which the structure under construction may need to be protected in accordance with Sentence 5.6.4.3.(1) may vary based on the fire safety plan. The protective encapsulation material or assembly of materials is intended to limit the potential for fire spread within the storey as well as to limit the potential for fire spread to upper storeys, thereby also limiting the potential exposure of adjacent structures to fire.