

Vernon Fire Rescue Services

Building Owner's
Responsibilities for
Fire Safety Equipment

British Columbia Fire Code Life Safety Equipment Maintenance Requirements

Vernon Fire Rescue Services has prepared this document of the fire safety equipment maintenance requirements for all existing buildings from Division B of the British Columbia Fire Code (2012).

Please contact Vernon Fire Rescue Services at (250) 550-3504 for any additional questions or concerns.

Owner's Responsibilities as identified in the British Columbia Fire Code

Unless otherwise specified, the owner or the owner's authorized agent shall be responsible for carrying out the provisions of this code. (BCFC Div. C 2.2.1.2). Before test, repairs or alterations are made to fire protection installations, a procedure of notification shall be established which shall include notifying the fire department and the building occupants, where necessary, for safety in the event of an emergency. (BCFC 6.1.1.3).

A written record shall be kept of all tests, inspection, maintenance or operational procedures for a period of two years after they are made and the record shall be made available upon request of the Authority Having Jurisdiction. (BCFC Div. C 2.2.1.2).

Definitions

CHECK – Visual Observation to ensure the device or system is in place and is not obviously damaged or obstructed.

INSPECT – Physical examination to determine the device or system will apparently perform in accordance with its intended function.

TEST – Operation of device or system to ensure that it will perform to accordance with its intended function.

OWNER – Lessee, person in charge, person who has care and control, person who holds out that the person has the powers and authority of ownership or who, for the time being, exercises the powers and authority of ownership.

AUTHORITY HAVING JURISDICTION (AHJ) - The

Director of Vernon Fire Rescue Services, and members of Vernon Fire Rescue Services exercising authority pursuant to the designation of power and terms according to the BC Fire Code, the applicable provincial acts and The City of Vernon Fire Services Bylaw.

Definitions (cont'd)

SUPERVISORY STAFF – Those Occupants of a building who have some delegated responsibility for the fire safety of other occupants under the building fire safety plan.

WATER-BASED FIRE PROTECTION SYSTEMS -

Sprinkler systems, standpipes, private hydrants, hose systems, water spray fixed systems, foam water sprinkler systems and spray systems and fire pumps.

QUALIFIED – A competent and capable person or company that has training and certification for a given field acceptable to the AHJ.



| Daily | ref.# |
|---|--------------------------------|
| Fire Alarm System – CHECK AC Power Lamp | BCFC 6.3.1.2 |
| Central Alarm and Control Facility – CHECK to ensure no trouble is indicated. | BCFC 6.3.1.2 |
| Fire Pump Rooms – CHECK temperature during cold weather. | BCFC 6.4.1.1 and NFPA 25 |
| Fire Protection Water Tanks – CHECK tank heating equipment, enclosure and water temperature during heating season in system without low temperature alarms. | BCFC 6.4.1.1 and NFPA 25 |
| Exit Signs – CHECK to ensure they are in clean and legible condition | BCFC 2.7.3.1 |
| Fire Doors – CHECK doors in the fire separation to ensure they remain closed | BCFC 2.2.2.4. Sentence 1 |
| Torches, Regulators and Welding Equipment – CHECK for leakage and defects. | BCFC 5.2.2.2 |
| Weekly | ref. # |
| Items marked with an asterisk * require written Div. C 2.2.1.2). | records (BCFC |
| Fire Pump – CHECK fuel and oil level | BCFC 6.4.1.1 |
| Fire Pump – CHECK water level in reservoirs | BCFC 6.4.1.1 |
| Fire Pump – INSPECT and Operate | BCFC 6.4.1.1 |
| Sprinkler System – CHECK that the control valves are open. | BCFC 6.4.1.1 and NFPA 25 |
| Dry Pipe Sprinkler System – CHECK pressure gauge to ensure that air pressure is being maintained. | BCFC 6.4.1.1 and NFPA 25 |
| Fire Protection Water Tanks – CHECK tank heating equipment, enclosure and water temperature during heating season in systems with low temperature alarms. | BCFC 6.4.1.1 and NFPA 25 |
| Emergency Generator Systems – INSPECT, TEST and MAINTAIN as per Table 2 of CAN / CSA –C282-05 Emergency Electrical Power Supply for Buildings. | BCFC 6.5.1.1 * |
| Hoods, Filters and Ducts in Ventilation Systems – CHECK for accumulation of combustible deposits and clean as required. | BCFC 2.6.1.3 |

| Monthly | ref.# |
|---|---|
| Items marked with an asterisk * require written r Div. C 2.2.1.2). | ecords (BCFC |
| Fire Alarm System – TEST system and | BCFC 6.3.1.2 |
| check all components on emergency power | and CAN / |
| supply including standby power batteries. | ULC -S536 * |
| Voice Communication System – TEST the system | BCFC 6.3.1.2 and CAN / ULC-S536 * |
| Water-Based Fire Protection Systems – INSPECT all control valve tamper switches. | BCFC 6.4.1.1 |
| Fire Protection Water Tanks – INSPECT the water level in tanks not equipped with supervised water level alarms connected to a constantly attended location. | BCFC 6.4.1.1 and NFPA 25 |
| Emergency Generator Systems – INSPECT, TEST and MAINTAIN as per Table 3 of CAN / CSA – CS282 -05. | BCFC 6.5.1.1* |
| Portable Fire Extinguishers – INSPECT and sign monthly log | BCFC 6.2.1.1* |
| Exit Doors – TEST all doors forming part of a means of egress to ensure they are operable. | BCFC 2.7.2.1 |
| Emergency Lighting Systems – INSPECT and TEST batteries, units and lamps. | BCFC 6.5.1.6 |
| Fire Doors - OPERATE all doors in | BCFC 2.2.2.4 |
| fire separations. | sentence 3 |
| Fire Alarm Drills – CONDUCT drills for | BCFC |
| supervisory staff in day care and health | 2.8.3.2* |
| care facilities. | |
| Every Three Months | ref.# |
| Items marked with an asterisk * require written in Div. C 2.2.1.2). | ecords (BCFC |
| All Emergency Systems in High Buildings | BCFC |
| as defined by Subsection 3.2.6 of the BC | 7.2.1.1* |
| Building Code – TESTs are required. | |
| Sprinkler Alarm Devices - INSPECT to | BCFC 6.4.1.1 |
| verify that they are free of physical | and NFPA 25 |
| damage. | |
| Water Based Fire Protection Systems – TEST all system water flow alarm devices. | BCFC 6.4.1.1 and NFPA 25 |
| Water Based Fire Protection Systems – TEST all pre-action / deluge valves. | 6.4.1.1.* |
| Water Based Fire Protection Systems – TEST all dry pipe valves/ quick opening devices. | BCFC 6.4.1.1 and NFPA 25* |
| Fire Department Connections – INSPECT. | BCFC 6.4.1.1 and NFPA 25 |

Fire Safety Maintenance Requirements

| Every Three Months (cont'd) | ref.# |
|---|--|
| Main Drain – TEST the main drain of at least one system downstream of a device that has the sole water supply through a backflow preventer and / or pressure reducing valves. | BCFC 6.4.1.1 and NFPA 25* |
| Fire Protection tanks – INSPECT the water level in tanks equipped with supervised water level alarms that are connected to a constantly attended location. | BCFC 6.4.1.1 and NFPA 25 |
| Clean – hoods, grease removal devices, fans and ducts on commercial equipment used in deep fat cooking, char broiling or similar cooking operations. | BCFC 2.6.1.9 * |
| Every Six Months | ref. # |
| Items marked with an asterisk * require written Div. C 2.2.1.2). | records (BCFC |
| Fire Protection Systems – TEST supervisory control valves. | BCFC 6.4.1.1 and NFPA |
| Special Fire Suppression Systems – TEST, INSPECT and MAINTAIN systems as per the appropriate NFPA Standard | BCFC 6.6.1.1 and NFPA |
| Commercial Cooking Equipment Suppression System – INSPECT and MAINTAIN. Clean hoods, grease removal devices, fans and ducts on commercial cooking equipment (other than deep fat cooking, | BCFC 2.6.1.9 ,NFPA 17 A, NEPA 96 BCFC 2.6.1.9 and NFPA 96 |
| Emergency Generator System – INSPECT, TEST and MAINTAIN as per CAN/CSA-282. | BCFC 6.5.1.1 |
| Fire Alarm Drills – CONDUCT in schools attended by children, three times in both spring and fall terms. | BCFC 2.8.3.2* |
| Annually | ref. # |
| Items marked with an asterisk * require written Div. C 2.2.1.2. | records (BCFC |
| Fire Alarm System – CONDUCT a test of the system by qualified personnel acceptable to the AHJ. | CAN / ULC- S536 and BCFC 6.3.1.2 |
| Voice Communication System – CONDUCT a test of the system by qualified personnel acceptable to the AHJ. | BCFC 6.3.1.4 |
| Water Based Fire Protection System – INSPECT, TEST, OPERATE and MAINTAIN components of each system as required by the appropriate NFPA or CAN/ULC document referenced in the BCFC. | BCFC 6.4.1.1 and NFPA Standards |

| Annually (cont'd) | ref.# |
|---|----------------------------------|
| Fire Pump – CONDUCT a flow test. | BCFC 6.4.1.1 and NFPA 25 |
| Water Based Fire Protection System Riser – TEST the main drain of each riser to determine whether there has been a change in the condition of the water supply piping and control valves. | BCFC 6.4.1.1 and NFPA 25 |
| Hydrants – INSPECT and flow test all private hydrants. | BCFC 6.4.1.1 and NFPA 25 |
| Standpipe Hose – INSPECT and re-rack. | BCFC 6.4.1.1 and NFPA 1962 |
| Fire Extinguishers – CONDUCT maintenance procedures by qualified personnel acceptable to the AHJ. | BCFC 6.2.1.1 and NFPA 10 |
| Electromagnetic Door Locks – TEST to ensure they work properly. | BCFC 2.7.2.1* |
| Sliding Doors – TEST sliding doors that are required to swing on their vertical axis in the direction of egress when pressure is applied. | BCFC 2.7.2.1* |
| Revolving Doors – TEST safety features | BCFC 2.7.2.1* |
| Mechanical Air Conditioning and Ventilation Systems – OPERATE disconnect switches. | BCFC 2.6.1.6 |
| Fire Dampers and Fire Stop Flaps – | BCFC 2.2.2.4 |
| Sprinkler Heads – INSPECT supply of spare sprinkler heads and replace as required. | BCFC 6.4.1.1 and NFPA 25 |
| Emergency Generator System – INSPECT, TEST and MAINTAIN as per CAN/CSA-282 | BCFC 6.5.1.1* |
| Chimneys, Flues and Flue Pipes - INSPECT | BCFC 2.6.1.4 |
| Chimney Spark Arrestors – INSPECT and CLEAN. | BCFC 2.6.2.3 |
| Fire Alarm Drills – CONDUCT for supervisory staff in buildings with fire alarm systems. | BCFC 2.8.3.2* |
| Fire Safety Plan Review – CONDUCT for supervisory staff a review of the plan annually to ensure the plan takes account of changes in the use and other characteristics of the building. | BCFC 2.8.2.1* |
| Exhaust and make up air system – TEST and MAINTAIN system initiating devices (i.e. carbon monoxide detector) in enclosed parkades. | BCFC 2.6.1.6* |

Fire Safety Maintenance Requirements

| Every Three Years | ref. # |
|---|------------------------------|
| Items marked with an asterisk * require written Div. C 2.2.1.2). | records (BCFC |
| Dry Pipe Sprinkler Systems – TEST the dry pipe valve with the control valve fully open and the quick - opening device if provided in service. | BCFC 6.4.1.1 and NFPA 25 |
| Every Five Years | ref. # |
| Items marked with an asterisk * require written Div. C 2.2.1.2). | records (BCFC |
| Sprinkler System – TEST extra – high temperature sprinkler heads as per NFPA document. | BCFC 6.4.1.1* |
| Standpipe System - Flow TEST systems | BCFC 6.4.1.1 and NFPA 25* |
| Standpipe System – Hydrostatically TEST system. | BCFC 6.4.1.1 and NFPA 25* |
| Standpipe System – TEST pressure control and pressure reducing valves. | BCFC 6.4.1.1 and NFPA 25* |
| Water Based Fire protection Systems – TEST all gauges. | BCFC 6.4.1.1 and NFPA 25* |
| Private hydrant – Flow TEST exposed and underground piping. | BCFC 6.4.1.1 and NFPA 25* |
| Fire Extinguishers – Hydrostatically TEST carbon dioxide and water type extinguishers. | BCFC 6.2.1.1 and NFPA 10* |
| Water Based Fire protection System – INSPECT fire protection water tank for corrosion. | BCFC 6.4.1.1 and NFPA 25 |
| Emergency Generator System – INSPECT, TEST and MAINTAIN as per Table 6 of CAN/CSA-282 Document. | BCFC 6.5.1.1* |

NOTE: Whenever a defect or deficiency is discovered in any fire equipment as a result of these maintenance requirements, CORRECTIVE ACTION must be taken IMMEDIATELY by the owner or the owner's authorized agent.

| Every Six Years | ref. # | |
|---|-----------------------------|--|
| Items marked with an asterisk * require written records (BCFC Div. C 2.2.1.2). | | |
| Fire Extinguishers – REPLACE the | BCFC 6.2.1.1 | |
| extinguishing agent in dry chemical fire | and NFPA 10 | |
| extinguishers. | | |
| Every Twelve Years | ref. # | |
| Items marked with an asterisk * require written re Div. C 2.2.1.2). | ecords (BCFC | |
| Fire Extinguishers – Hydrostatically TEST dry | BCFC 6.2.1.1 | |
| chemical and vaporizing liquid fire extinguishers. | and NFPA 10* | |
| Every Twenty Years | ref. # | |
| Items marked with an asterisk * require written re Div. C 2.2.1.2). | ecords (BCFC | |
| TEST fast response sprinkler heads | BCFC 6.4.1.1 and NFPA 25 | |
| As Required | ref. # | |
| Items marked with an asterisk * require written records (BCFC Div. C 2.2.1.2). | | |
| Fire Department Access - ENSURE streets, | BCFC 2.5.1.5 | |
| yards and private roadways that are provided for fire department access are kept clear. | | |
| Dry Pipe Sprinkler Systems – TEST the dry pipe | BCFC 6.4.1.1 | |
| valve with the control valve fully open and the | and NFPA 25 | |
| quick-opening device, if provided, in service. | | |
| Spray Booths – CLEAN residue in walls, | BCFC 5.4.5.2 | |
| ceilings, floors, etc. from spray booths. | and NFPA 33 | |
| Means of Egress – CHECK exterior | BCFC 2.7.1.7 | |
| passageways and exterior exit stairs and ensure | | |
| they are maintained free of snow, ice and | | |
| obstructions. | | |
| Smoke Control Equipment – MAINTAIN | BCFC 7.3.1.1. | |
| equipment in a manner that ensures satisfactory | | |
| operation. | 50500111 | |
| Sprinkler System – INSPECT auxiliary drains. | BCFC 6.4.1.1 and NFPA 25 | |
| Fire Doors – CHECK doors in the fire | BCFC 2.2.2.4 | |
| separations to ensure they are closed. | | |
| Dust Producing Operations – CLEAN any | BCFC 5.3.1.2 | |
| combustible dust-producing operations. | | |
| | BCFC 5.4.5.2 | |
| Dry-powder Finishing Operations – VACUUM, | and NFPA 33 | |
| CLEAN and DUST any dry-powder finishing operations. | | |
| Industrial Ovens – INSPECT, CLEAN and | BCFC 5.4.1.2 | |
| MAINTAIN all industrial ovens and associated | and NFPA 86 | |
| ductwork. | | |
| Lint Traps in laundry equipment – CHECK and | BCFC 2.4.1.4 | |
| CLEAN as required. | | |
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Emergency planning

The building owner is responsible for preparing a fire safety plan, acceptable to the Authority Having Jurisdiction, and appointing supervisory staff to carry out the same in all public assembly buildings, care or detention buildings, all buildings equipped with a fire alarm, demolition and construction sites, storage areas, areas where flammable liquids or combustible liquids are stored or handled and areas where hazardous processes or operations occur. (BCFC 2.8.1.1 and 5.1.5.1).

Section 2.8 of the BC Fire Code must be referred to in order to get the exact regulations as it applies to your building.

SECTION 2.8

Subsection 2.8.1. General

- 2.8.1.1 The requirements of this section apply to every building containing a Group A or Group B occupancy, and to every building required to have a fire alarm system.
- 2.8.1.2 (1) Supervisory staff shall be trained in the fire emergency procedures as described in the fire safety plan before they are given any responsibility for fire safety.

Subsection 2.8.2. Fire Safety Plan

- 2.8.2.1 (1) A fire safety plan acceptable to the Director of Vernon Fire Rescue Services and conforming to the BC Fire Code shall be prepared for buildings regulated by Article 2.8.1.1 of the BC Fire Code.
 - The emergency procedures to be used in case of fire including:
 - i. Sounding the fire alarm
 - ii. Notifying the fire department
 - iii. Instructing the occupants on procedures to be followed when the fire alarm sounds
 - iv. Evacuating occupants, including special provisions for persons requiring assistance
 - v. Confirming, controlling and extinguishing the fire
 - The appointment and organization of designated supervisory staff to carry out the fire safety duties
 - The training of supervisory staff and other occupants in their responsibilities for fire safety,
 - Documents, including diagrams, showing the type, location and operation of the building fire emergency systems,
 - e) The holding of fire drills,
 - f) The control of fire hazards in the building and
 - The inspection and maintenance of building facilities provided for the safety of occupants.

- 2.8.2.1. (2) The fire safety plan shall be reviewed at intervals not greater than 12 months to ensure that it takes account of change in the use and other characteristics of the building.
- 2.8.2.2 (1) A sufficient number of supervisory staff shall be on duty in care or detention occupancies to perform the tasks outlined in the fire safety plan.
- 2.8.2.3 (1) In Group A, Division 1 assembly occupancies containing more than 60 occupants, there shall be at least one supervisory staff member on duty in the building to perform the tasks outlined in the fire safety plan whenever the building is open to the public.
- 2.8.2.4 (1) In buildings within the scope of subsection 3.2.6 of Division B of the BC Building Code, the fire safety plan shall, in addition to the requirements of sentence 2.8.2.1 (1) include:
 - The training of supervisory staff in the use of the voice communications system,
 - b) The procedures for use of the elevators,
 - The action to be taken by supervisory staff in initiating any smoke control or other fire emergency systems installed in a building in the event of fire until the fire department arrives,
 - The instructions to the supervisory staff and fire department for the operation of the systems referred to in clause (c); and
 - The procedures established to facilitate fire department access to the building and fire location within the building.
- 2.8.2.5. (1) The fire safety plan shall be kept in the building for reference by the fire department, supervisory staff and other personnel.
- 2.8.2.5 (2) The fire safety plan for a building within the scope of subsection 3.2.6 of Division B of the BC Building Code shall be kept at the central alarm and control facility.
- 2.8.2.6 (1) A copy of the fire emergency procedures and other duties for supervisory staff as laid down in the fire safety plan, shall be given to all supervisory staff.
- 2.8.2.7 (1) At least one copy of the fire emergency procedures shall be prominently posted on each floor area.