

# FIRE SAFETY PLAN

**FOR:** Nelson Elementary School

**ADDRESS:** 4850 Irmin Street  
Burnaby, B. C.



**DESIGN AND DEVELOPED BY:**

BLACK TUSK FIRE & SECURITY INC  
SUITE 2-4416 DAWSON STREET  
BURNABY, BC, V5C 4B9  
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SUBMITTED DATE: December 2023

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## FIRE DEPARTMENT INFORMATION

### SUPERVISORY STAFF:

The occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.

### APPOINTMENT OF THE FIRE SAFETY DIRECTOR

Date: December 28, 2023  
Name: Maintenance Service Centre  
Work Address: 3350 Norland Avenue, Burnaby, BC  
Telephone: 604-296-6930  
Email: [msc@burnabyschools.ca](mailto:msc@burnabyschools.ca)  
Hours: 7:30am to 4:00pm

### APPOINTMENT OF THE DEPUTY FIRE SAFETY DIRECTOR

Date: December 28, 2023  
Name: Security Monitoring Station  
Work Address: N/A  
Telephone: 604-777-3420  
Email: N/A  
Hours: 9:00am to 5:00pm

24 Hour Emergency Phone Number: 604-777-3420

**EMERGENCY CONTACT TELEPHONE NUMBERS**

<b>Resource</b>	<b>Company</b>	<b>Contact Number</b>
Burnaby Fire Department Emergency		911
Burnaby Fire Department Non-emergency number		604-294-7195
Police Department Emergency		911
Police Department Non-emergency number		604-646-9999
BC Ambulance Emergency		911
BC Ambulance Non-emergency Number		604-872-5151
Poison Control		604-682-5050
Fire Alarm System	Black Tusk Fire & Security	604-299-5654
Monitoring	Orion Security Systems Ltd	604-777-3420
Emergency Lighting	Black Tusk Fire & Security	604-299-5654
Portable Extinguishers	Black Tusk Fire & Security	604-299-5654
Sprinkler System	Black Tusk Fire & Security	604-299-5654
Standpipe System	Black Tusk Fire & Security	604-299-5654
Floor Isolation Valves	Black Tusk Fire & Security	604-299-5654
Fire Safety Director	Maintenance Service Centre	604-296-6930
Deputy Fire Safety Director	Security Monitoring Station	604-777-3420
Fire Safety Plan	Black Tusk Fire Security	604-299-5654

## BUILDING DESCRIPTION

Building name	Nelson Elementary School
Building address	4850 Irmin Street, Burnaby, BC
Year of construction	1925/1949/1955/1964
Occupancy	Group A Division 2
Building type	combustible
Below grade	below Stage
Above grade	2
Main construction material	Wood
Exterior walls & windows	wood frame, aluminum windows
Interior walls & finish	gyproc on top of wood studs
Roof construction	wood roof and asphalt membrane

### Areas of Usage

Area	Usage
School building	Main entry, office, washrooms, Gymnasium, Classrooms, Staff Room, Mechanical Room, Electrical Room, Library,
2 <sup>nd</sup> Floor	Classrooms, Kindergarten, upper part of gymnasium
Portables	classrooms

## FIRE ALARM DESCRIPTION/LOCATION

The school is protected by a single stage conventional Pyrotronic System 3 fire alarm system. The fire alarm control panel is located in the Electrical Room.

The remote annunciator is located at west entry. The fire alarm system is monitored by Orion Security Systems Ltd. (Account#Y0043). [Tel:604-777-3420](tel:604-777-3420).

<b>Manufacturer</b>	Pyrotronic
<b>Model</b>	System 3
<b>Location</b>	Electrical Room
<b>Stages</b>	Single
<b>Supervised</b>	Yes
<b>Monitored</b>	Yes
<b>Pull Station Locations</b>	Nearby all Exit Doors
<b>Smoke Detector Locations</b>	common corridor, classrooms, air ducts
<b>Heat Detector Locations</b>	Mechanical Room

## **FIRE ALARM – SEQUENCE OF OPERATIONS**

**Do not silence or reset the panel in alarm until it has been determined by the proper authorities that there is no fire!**

There are at least three lamps you must familiarize yourself with: **POWER ON LAMP** (usually green), **ALARM ZONE LAMPS** (usually red), and **TROUBLE LAMP(S)** (yellow)

There are at least two switches you must familiarize yourself with: **SYSTEM REST, AND SIGNAL SILENCE**.

### **NORMAL MODE**

The fire alarm system senses that all detectors, devices, wiring and all panel components are operating properly. The only visual indication on the panel is the illuminated **AC ON** lamp.

### **ALARM MODE**

- a) **Audible and Visual Indication:** Bells throughout the building are sounding. At the panel there is only visual indication of alarm. If the panel is zoned, locate the zone lamp (usually red) that is illuminated, note the description to locate the cause of the alarm.
- b) **Cause of an Alarm:** An alarm is caused by activation of a manual station or detectors in the building. To view which devices in a zone signaled an alarm:
  1. Check what light is illuminated.
- c) **How to Silence the Bells:** Open alarm cabinet and then press **SIGNAL SILENCE**. All audible notification appliances will turn off. The Alarm Silence LED indicates that the Alarm Silence feature is active. A new alarm event or pressing Alarm Silence again cancels the operation and turns the notification appliances back on. **Note:** Depending on panel programming, visible notification appliances may not silence, notification ion appliances may not silence if water is flowing through the sprinkler system, and Alarm Silence may be inhibited for up to 5 minutes after the control panel goes into alarm.
- d) **To Reset the Panel:** Make sure all smoke detectors are free from smoke and all manual pull stations are restored to normal and then press **SYSTEM RESET**.

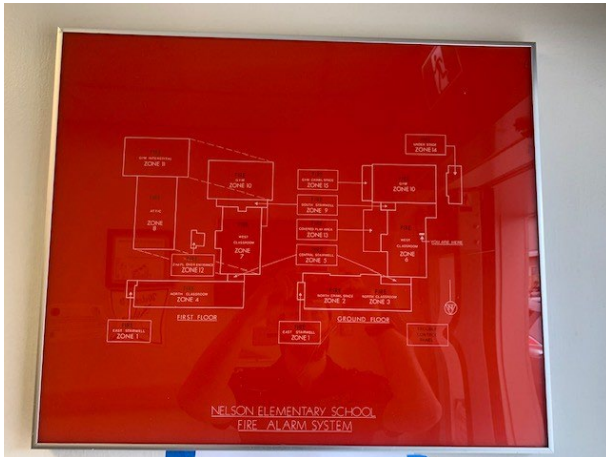
**Note:** Depending on panel programming, reset may be inhibited for up to 5 minutes after the controlpanel goes into alarm.

## TROUBLE MODE

- a) **Audible and Visual Indication:** At the panel is a buzzer which is sounding, in addition one or more lamps (usually yellow and labeled **TROUBLE**) are illuminated.
- b) **Cause of Trouble:** Trouble on the system could be from many sources and requires a qualified technician to troubleshoot and locate the actual cause.

**To Reset:** The panel will self-restore once the trouble cause has been eliminated. If operating the RESET switch will not clear a trouble from the panel, refer above to Silence the Trouble Buzzer.

Fire alarm annunciator



Fire alarm control panel



## **ELECTRICAL DISCONNECT**

The Electrical Shut-off is located inside the Electrical Room.

## **ELEVATOR**

N/A

## **EMERGENCY GENERATOR**

N/A

## **EMERGENCY LIGHTING**

In the event of an A.C. power failure, emergency lighting has been provided to cover all common hallway and exit signage. The emergency lighting system has been connected to battery packs.

## **EXITING**

(See floor layout plans)

- #1- (Northeast Stair)** located on the northeast side of the school, accessing Main Floor to 2<sup>nd</sup> Floor, exit onto open space off Irmin Street.
- #2- (Northwest Stair )** located on the northwest side of the school, accessing Main Floor to 2<sup>nd</sup> Floor, exit onto parking lot.
- #3- (South Stair )** located on the south side of the school, accessing Main Floor to 2<sup>nd</sup> Floor, exit onto open space off Rumble Street.
- #4-** each classroom has provided an exit onto Irmin Street on the north side, gravel sports on the east side, Rumble Street on the south side and Parking Lot on the west side respectively.

A circulation stair is also provided at the center of the school, serving Main Floor to 2<sup>nd</sup> Floor for convenience.

## **Gymnasium**

**#1 – 2** exits located on the south side, exits onto Rumble Street.

## **Portables**

each classroom has provided an exit onto Gravel Sports Field.

## **FIRE DEPARTMENT ACCESS ROUTES**

Primary: along Irmin Street

Wide: Over 6 meters

Marked: No

## **FIRE DEPARTMENT CONNECTION**

N/A

### **FIRE DEPARTMENT LOCKBOX**

There is NO Fire Department Lockbox provide for this school.

### **FIRE PUMP**

N/A

### **FIRE DEPARTMENT ROOF ACCESS**

There is no internal roof access in the school.

### **FIRE HYDRANT LOCATIONS**

(See floor plan drawing)

There are three hydrants located in proximity to the school.

#1 - Located on Irmin Street on the north side of the school.

#2 - Located on the northwest of Rumble Street and Nelson Avenue.

#3 - Located on the northwest of Rumble Street.

### **GAS SHUT-OFF LOCATION**

(See floor plan drawing)

The gas shut-off for the school is located on the east side of the school.

The gas shut-off for the portables is located on Irmin Street on the north side of the portables

Gas Supply Shut-off



### **HAZARDS**

N/A

### **HEATING, VENTILATION & AIR CONDITIONING**

Type of heating: hot water boilers

## PORTABLE FIRE EXTINGUISHERS

(See floor plan drawing)

Provided throughout the school are 5lb "ABC" type fire extinguishers. These extinguishers are to be used on "ABC" type fires only. See following pages for instructions on use and identification.

## SMOKE CONTROL

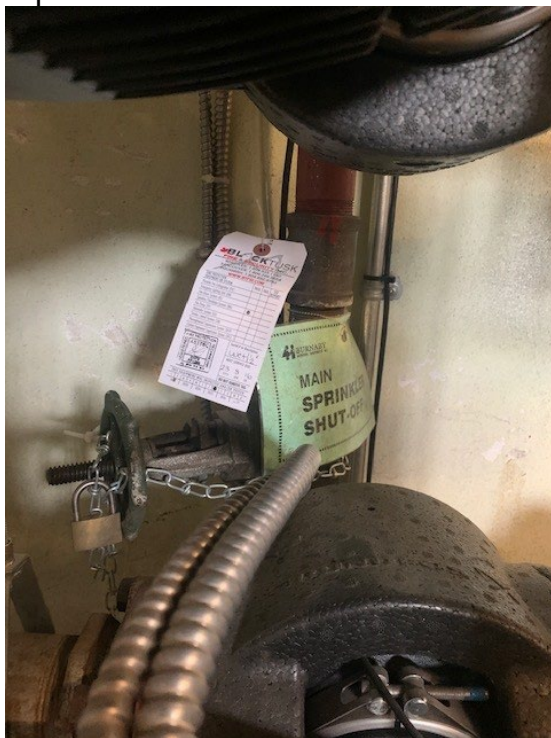
N/A

## SPRINKLER SYSTEM

(See floor plan drawing)

A "wet" sprinkler system provided coverage for the Mechanical/Boiler Room only.

Sprinkler volves



## STANDPIPE SYSTEM

N/A

## WATER SHUT-OFF LOCATION

(See floor plan drawing)

The water shut-off for fire and domestic water supply into the school is located in the Mechanical Room.

Water Shut-off



**SITE PLAN**



IRMIN STREET

PARKING #2

LARGE CLASS 3  
WGTANK  
HAZ

PORTABLE CLASSROOM  
PORT 187

PORTABLE CLASSROOM  
PORT 174

GRAVEL SPORTS FIELD #2

PORTABLE CLASSROOM  
PORT 165



LANE

PARKING #1

FACP

FAAP  
FSP

PLAYGROUND #1

GRAVEL SPORTS FIELD #1

NELSON AVENUE

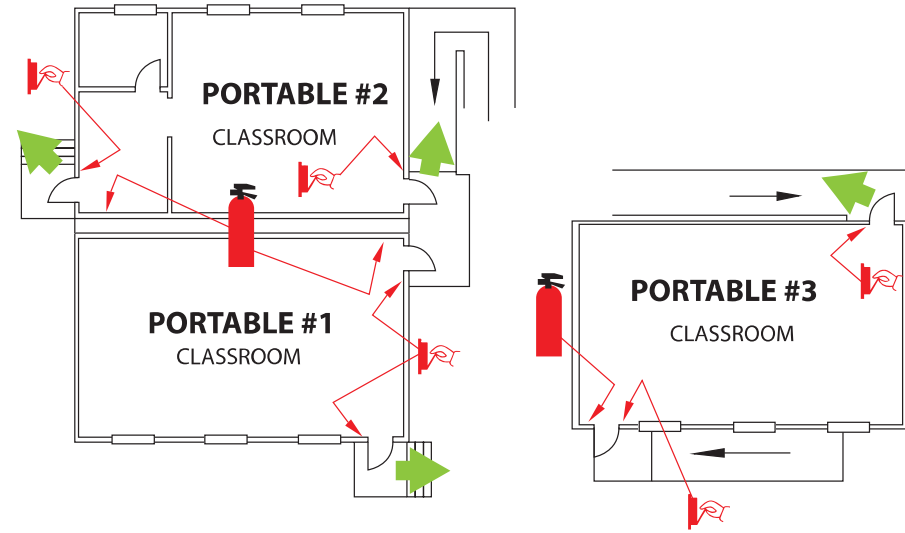
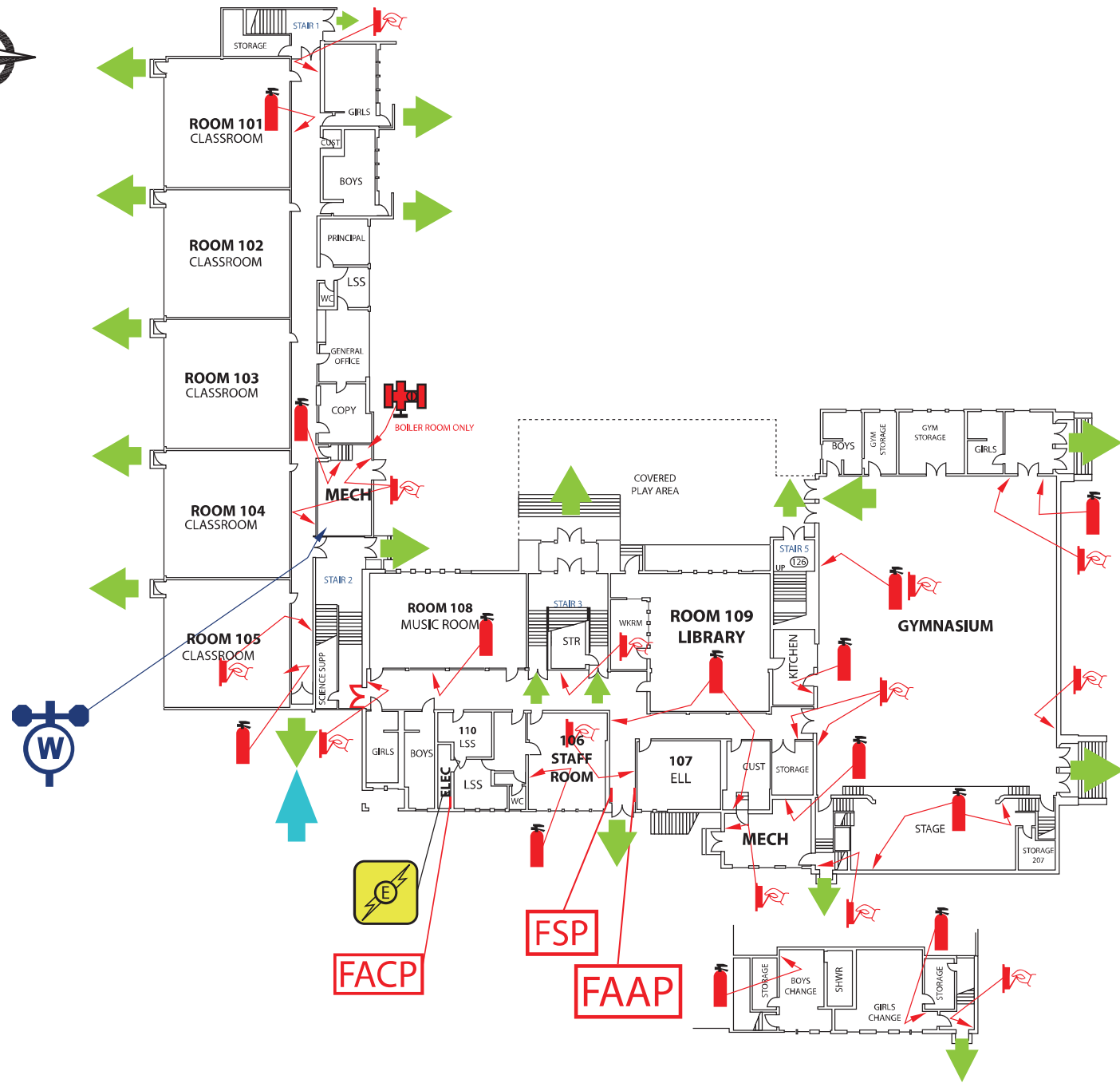
RUMBLE STREET











LEGEND			
	ASSEMBLY AREA		FIRE SAFETY PLAN
	MAIN ENTRANCES		FIRE ALARM CONTROL PANEL
			FIRE ALARM ANNUCIATOR
	SPRINKLER SHUT-OFF		DOMESTIC WATER SHUT-OFF
	GAS METER SHUT-OFF		FIRE HYDRANT - PUBLIC
			ELECTRICAL VAULT



NELSON ELEMENTARY  
4850 IRMIN STREET  
BURNABY, BC  
SITE PLAN  
FIRE SAFETY PLAN

**FLOOR PLAN**






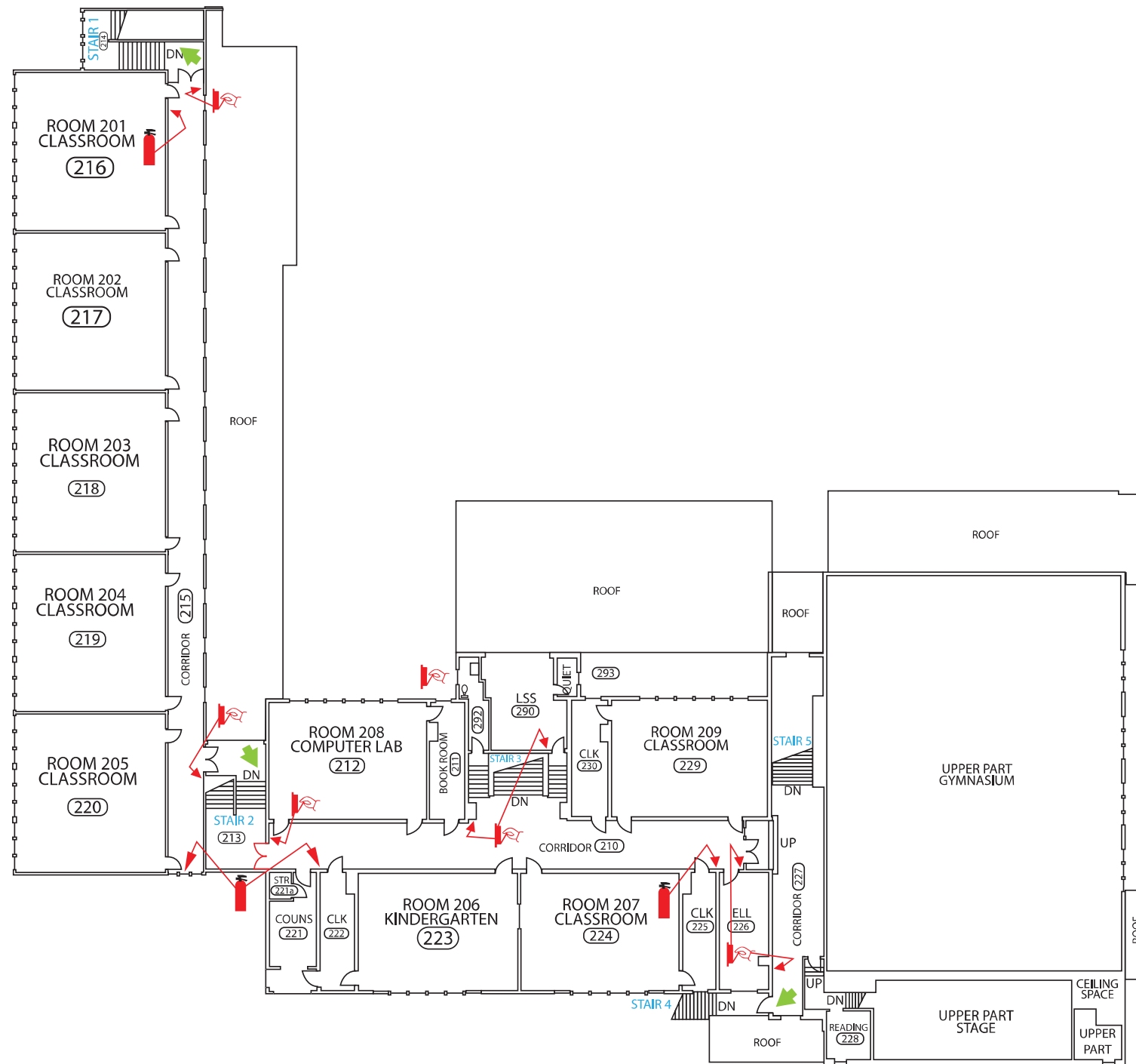
LEGEND			
	FIRE PULL STATION		DOMESTIC WATER SHUT-OFF
	FIRE EXTINGUISHER		FIRE SAFETY PLAN
	FIRE EXIT		FIRE ALARM CONTROL PANEL
	ELECTRICAL VAULT		FIRE ALARM ANNUNCIATOR
	FIRE WALL/ FIRE DOORS		SPRINKLER SHUT-OFF

Nelson Elementary  
4850 Irmin Street  
Burnaby, B.C.  
Main Floor  
Fire Safety Plan





LEGEND	
	FIRE PULL STATION
	FIRE EXTINGUISHER
	FIRE EXIT



Nelson Elementary  
4850 Irmin Street  
Burnaby, B.C.  
Second Floor  
Fire Safety Plan

## PART 1 OBJECTIVES OF THE FIRE SAFETY PLAN

### OBJECTIVES

Fire safety is important for everyone at this school. The consequences of poor fire safety practices and a lack of emergency planning could pose a serious threat, not only to our residents, but also to the community and environment in the event of an emergency.

In an effort to prevent fires and minimize the damage from fires when they occur, we have developed this Fire Safety Plan (FSP). It is a detailed document designed to deal with all aspects of fire safety relating to our specific building and property. As such, it becomes our reference manual outlining the fire safety practices that we will use regularly.

Our Fire Safety Plan achieves three objectives:

1. **Fire Prevention** – To prevent the occurrence of fire through the control of fire hazards and the proper maintenance of the building's fire protection systems and facilities.
2. **Occupant Safety** – To establish a systematic method for safe and orderly evacuation of the building in the case of fire or other emergency.
3. **Fire Control and Extinguishment** – To establish procedures that will maximize the probability of controlling and extinguishing a fire in the safest and most efficient manner.

To achieve those objectives, some personnel have to be trained to assume supervisory duties to:

1. Effectively implement the fire prevention program.
2. Direct and assist the orderly movement of occupants in the event of a fire.
3. Perform fire control until the fire department arrives.

### OUR FIRE SAFETY PLAN

Our Fire Safety Plan not only reflects the unique characteristics of the building and property, and any hazardous processes and operations it contains, but also considers the available firefighting infrastructure in the community. For this reason, consultation has been made with the local fire department and other applicable regulatory authorities, such as WorkSafeBC and the BC Safety Authority.

The Fire Safety Plan includes the following information to achieve the three objectives of fire prevention, occupant safety, and fire control and extinguishment as per current BC Fire Code:

- Emergency procedures to be used in case of fire, including sounding the alarm, notifying the fire department, provisions for access for firefighting, instructing occupants on procedures to be followed when the fire alarm sounds, evacuating endangered persons, and confining, controlling and extinguishing the fire.
- The means to prevent fires and the methods to control fire hazards throughout the building.
- Instructions to ensure means, implemented to prevent fires and methods to control fire hazards throughout the building, are followed.
- Information about the appointment, organization and instruction of designated supervisory staff and other occupants, including their related fire safety duties and responsibilities.
- The method and frequency of conducting fire drills.
- Detailed maintenance procedures for fire protection systems and building facilities, systems, equipment and devices.
- The identification of alternate fire safety measures in the event of a temporary shutdown of fire protection equipment or systems, so that occupant safety can be assured.
- Instructions and schematic diagrams describing the type, location and operation of building fire emergency systems.

## **BENEFITS OF IMPLEMENTING THE FIRE SAFETY PLAN**

The efforts to develop and implement this fire safety plan will:

- Reduces the incidence of fire.
- Promotes fire hazard identification and elimination.
- Promotes employee safety and awareness.
- Increases employee morale by allaying safety concerns.
- Coordinates building and fire department resources during a fire emergency.
- Reduces the potential impact of a fire on the building and community (injuries, dollar losses, liability, etc.) should a fire occur.
- Assist with *BC Fire Code* compliance.

Part of the Fire Safety Plan implementation is ensuring it remains a “**living**” document, meaning each year the plan is reviewed. The plan is revised accordingly, and the changes documented in the Noteworthy Changes section of the plan.

## EMERGENCY EVACUATION CONCEPT

Trained staff can be of great value in directing and assisting the orderly movement of people in the event of a fire and performing fire control until the arrival of the Fire Department.

Evacuation procedures rely heavily on the actions and responsibilities of the Fire Safety Director. As such these staff members require continued training, frequent drilling in order to fulfill their responsibilities during an emergency. Conducting regular training and meeting sessions heighten the preparedness for required response. A team approach is essential for life saving procedures to have any effect.

Based on these facts, the evacuation objectives outlined in this manual are required to be discussed and practiced regularly with consideration given to all areas of life safety.

## EVACUATION SEQUENCE

During an emergency, all occupants will exit the building via a safe exit. Challenged persons should proceed with their assistants, if available, to the nearest safe exit.

The Instructions for Occupants in Case of Fire posted prominently on each floor area provides quickly read information on procedures to follow in the event of a fire.

Use of this concept should ensure a systematic method of safe and orderly evacuation of the building in the event of a fire.

**PART 2  
FIRE SAFETY DIRECTOR, DEPUTY FIRE SAFETY  
DIRECTOR & FIRE WARDEN'S  
RESPONSIBILITIES**

The BC Fire Code defines supervisory staff as those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.

The effectiveness of the Fire Safety Plan depends largely upon the ability, energy, and experience of the emergency response supervisory staff appointed fire safety responsibilities. The building owner has clearly defined their authority so that the occupants may be safeguarded against fire. They are instructed in the fire emergency procedures as described in the Fire Safety Plan before they are given any responsibility for fire safety.

#### **FIRE SUPERVISORY STAFF DUTIES**

The delegated responsibility for fire safety for each position is identified in this section.

#### **BUILDING OWNER**

The school is responsible for preparing a Fire Safety Plan and must ensure that the building and facilities comply with the provisions of the Fire Code including:

1. Establishment of emergency procedures to be followed at the time of an emergency.
2. Appointment and organization of designated supervisory staff to carry out fire safety duties.
3. Instruction of supervisory staff and other occupants so that they are aware of their responsibilities for fire safety.
4. Assuring those checks, tests, and inspections as required by the Fire Code are completed on schedule and records are retained and maintained.
5. Notification of the local fire department or local government regarding changes to the Fire Safety Plan.

#### **FIRE SAFETY DIRECTOR (FSD)**

The appointed FSD is not expected to be in the building on a continuous basis; however, the FSD should be available to respond to the building on notification of a fire emergency, in order to provide assistance as described in the plan. In the

event that the FSD is unavailable, the Deputy Fire Safety Director will be available to perform the obligations of the absent director.

The Fire Safety Director has the following responsibilities and duties:

1. Administering and maintaining the Fire Safety Plan. This should include:
  - a. Updating the plan when alterations are made to the building or processes.
  - b. Developing appropriate policies and procedures, or ensuring they are developed, e.g., Hot Work, Storage of Dangerous Products and Materials, Storage and Dispensing of Fuel, etc.
2. Training of Deputy Fire Safety Director(s) and other appointed supervisory staff.
3. Ensuring that those expected to use the portable fire extinguishers are trained.
4. Maintaining records on the following:
  - a. Fire incidents
  - b. False alarms
  - c. Fire drills
  - d. Discharge or operation of fire equipment
  - e. Training events
  - f. Name, location, and persons requiring assistance and their volunteer assistants (specify assistance required).
  - g. Minutes of fire safety meetings (if applicable)
  - h. Accountability list and shift attendance list
5. Ensuring that fire protection systems are inspected, maintained and serviced in accordance with the plan and the fire code, and where an inspection, maintenance or testing procedure is beyond in-house capabilities, to have qualified 3<sup>rd</sup> party personnel complete the procedure.
6. Ensuring that additional precautions are taken to offset the hazard to occupants when fire protection systems are inoperable. This should include:
  - a. Checking the fire safety plan and fire code when fire systems are in need of repair.
  - b. Advising the fire department of the system status.
7. Ensuring that building maintenance, alteration or renovation does not expose the building or occupants to undue fire hazards, and precautions are taken to ensure building and occupant safety. This should include:
  - a. Checking the fire safety plan and the fire code when such activities take place to ensure that they meet the requirements of the fire safety plan and fire code regulations.
  - b. Ensuring that, where a fire watch is required, that the fire watch is provided with the appropriate equipment to properly fulfill the duties.

8. Ensuring that supervisory staffs are available to respond to the premises in the event of notification of an emergency. This should include:
  - a. Ensuring the Deputy Fire Safety Director available when the FSD is not.
9. Providing information to occupants on general fire safety and evacuation procedures. This should include:
  - a. Providing new occupants with an overview of the Fire Safety Plan and education on Part 3 of the plan.
  - b. Providing the appropriate level of education and training, based on job duties, on policies and procedures designed to control fire hazards, e.g., Hot Work, Compressed Gas Use, Fuel Storage and Dispensing, Storage of Dangerous Goods, etc.
  - c. Notifying occupants whenever the Fire Safety Director or Deputy Fire Safety Director appointments change.
10. Resolving any fire hazards which are reported by occupants or the fire department.
11. Maintaining familiarity with the buildings fire protection systems.
12. Maintaining familiarity with fire regulations. This should include:
  - a. Obtaining and reviewing a copy of the B.C. Fire Code.
  - b. Ensuring that the electrical rooms are not used for storage.
  - c. Ensuring that established policies are adhered to.
13. Considering other emergency situations which could affect the building such as earthquakes, or natural gas leaks.
14. Notifying the fire alarm monitoring station when the emergency contacts change or delete.

### **DEPUTY FIRE SAFETY DIRECTOR**

The responsibilities and duties include:

1. Assisting the FSD in implementing the fire safety plan.
2. Assuming the position of Fire Safety Director in the absence of the appointed FSD.
3. Perform duties assigned by FSD.

### **ASSIGNED FIRE RELATED INSPECTIONS**

The Fire Safety Director and others are assigned fire related inspections. These inspections include inspections to determine:

1. The state of repair of the building, other structures, equipment, and stored materials.
2. The state of repair of the fire protection equipment, monitoring equipment and alarms.

The responsibilities and duties include:

1. Conduct all required inspections as per the FSP's outlined frequencies.
2. Complete and submit an inspection report for each inspection.
3. Ensure that all corrective actions and recommendation are acted upon.
4. Report to the Fire Safety Director all actions and recommendations not acted upon in a timely fashion.

### **FIRE WATCH AND FIRE MONITOR**

A "fire watch" is a dedicated person or persons whose sole responsibility is to look for fires within an established area. Fire watch is required (1) in the event of temporary failure of the fire alarm system, (2) where activities require the interruption of any fire detection, suppression, or alarm system component or (3) activities increase the risk of fire, e.g., hot work.

Individuals will be assigned and trained to fulfill fire watch role when required. The responsibilities and duties are task specific and include:

1. Be familiar with the building and procedures for sounding an alarm in the event of a fire.
2. Watch out for fire hazards in the workplace while work is performed by other employees.
3. Maintain the conditions and requirements stated on the Hot Work permit.
4. Keep flammable materials from ignition sources.
5. In the event of fire, extinguish it immediately or turn a fire alarm on.
6. Call 911.
7. Stop operations if you find any hazardous condition.
8. Never leave the job site while the work is being done unless another Fire Watch can replace you.
9. When all operations are done, do not leave the worksite unless you're sure that there are no hot sparks, burning embers and other fire hazards unless another fire watch or fire monitor is assigned.
10. Return all firefighting equipment to their original location.

### **FIRE WARDENS**

The Fire Warden's primary responsibility is to manage the evacuation of personnel from his/her designated area during a fire or other emergency. During normal business operation, the fire wardens will conduct daily checks to ensure the fire prevention efforts and emergency evacuation routes are in a good state of repair.

individuals will be assigned and trained to fulfill fire warden role. The responsibilities and duties are task specific and include:

- Advise all personnel within their area to evacuate by the nearest safe exit during a fire or other emergency
- Assist in the evacuation of persons with disabilities
- Check washrooms and rest areas and inform any personnel of the emergency situation
- Close all doors (**do not lock**) behind you as you exit the building
- Leave the building
- Ensure that the entrance to the building is not congested by directing persons away from the entrance
- Co-operate with Security and fire officials
- Obey promptly any instructions you may receive from Security or Fire Department personnel
- Co-operate with Security and the Integrated Risk Management department in any debriefings resulting from an evacuation

The Fire warden will conduct daily checks for:

- Accumulation of combustible materials, rubbish or flammable liquids.
- Dangerous ignition sources, i.e. worn extension cords, oily rags, overheating equipment.
- Exit lights in good order and adequate lighting in public corridors and stairwells.
- Fire and exit doors and their self closing hardware to ensure that they are in good operating condition. Doors must not be wedged open for any reason.
- Unobstructed exit routes. (Definition of exit routes in previous sections).
- Condition of firefighting equipment.

Assistant Fire wardens will assist the Fire warden in fire prevention and emergency evacuation. The assistant will assume the duties of the Fire warden in his/her absence.

## FIRE DRILLS PROCEDURES

Once each **year** the Fire Safety Director shall conduct a fire drill. The drill will not test any evacuation skills of the occupants; however, it will provide the Fire Safety director, Deputies, and Occupants with the opportunity to hear the fire alarm gongs and consider their actions in the event that the fire was real. We will use the following procedure when conducting the fire drill:

- Notify occupants of the date and time of the drill.
- Notify the alarm monitoring service (when applicable) and the fire department, on their non-emergency phone numbers, that you are planning to have a non-evacuation fire drill, and that you will call them back when the drill is complete.
- Discuss evacuation procedures with Deputy FSD and those occupants willing to participate.
- Have the Deputy FSD perform the *If You Discover a Fire* scenario and the *In Case of Fire* procedures for occupants. The FSD should perform his or her duties as detailed in the plan.
- Restore the manual fire alarm pull station, and then reset the fire alarm system.
- Notify the alarm monitoring company (when applicable) and the fire department that the fire drill is complete.
- Discuss drill with occupants in an attempt to identify problems.
- Complete the *Incident/Activity Report*.

## **PART 3 INSTRUCTIONS TO OCCUPANTS**

### **GENERAL FIRE PREVENTION INSTRUCTIONS**

- Smoke only within designated outdoor areas and only dispose cigarette butts in the provided waste container.
- Be alert around electrical equipment. If electrical equipment is not working properly or if it gives off an unusual odour - often the first sign of a problem that could cause a fire - disconnect the equipment and call an appropriate maintenance contractor.
- Promptly replace any electrical cord that is cracked or has a broken connection.
- When using extension cords, protect them from damage; do not put them across doorways or any place where they will be stepped on or chafed.
- Do not plug one extension cord into another, and do not plug more than one extension cord into one outlet.
- Keep all heat-producing appliances away from the wall and away from anything that might burn. Leave plenty of space for air to circulate around equipment that normally gives off heat.
- Make sure all appliances in your area - such as coffee makers and hot plates - are turned off when not in use. It's best to assign one person to make this check every day.
- Do your part to keep storage areas, stairway landings and other out-of-way locations free of wastepaper, empty cartons, dirty rags and other material that could fuel a fire.
- Keep stairways, landings, hallways, passageways and exits (inside and out) clear of any obstructions at all times.
- Promptly remove all combustible waste from all areas where waste is placed for disposal.
- Report fire hazards to the Fire Safety Director.

### **FIRE PREPAREDNESS**

- Know the location of the two exits closest to your area. Count the number of doors between you and each of those exits - in case you must escape through a darkened, smoke-filled corridor where you can't read the names on the doors.
- Learn where the nearest pull station is located and how to activate it.

- Post the 9-1-1 or Fire Department Emergency Number on your telephone.
- Learn the sound of your building's fire alarm.
- During the annual fire drill which will be conducted by the Fire Safety Director, do the following:
  - Review the basic IN CASE OF FIRE procedures posted in the corridors, and Evacuation Procedures.
  - Ensure you know who the Fire Safety Director and Deputy are, and how to contact them.
  - Read the other information provided in the Fire Safety Plan.
- The cleaning of a smoke alarm with a vacuum cleaner at least twice a year is recommended.
- Volunteer to be one of two designated persons who will assist a person requiring assistance.

## INSTRUCTIONS TO OCCUPANTS IN CASE OF FIRE

### Designated Assembly Area

In the gravel sports field on the west side of the school

### WHEN YOU DISCOVER A FIRE IN THE BUILDING

ACTIVATE a fire alarm pull station.

PHONE 9-1-1 to report a fire at **4850 Irmin Street, Burnaby, B.C.**

FIGHT the fire ONLY if it is SMALL and you are NOT alone.

EVACUATE via the nearest safe exit.

ASSIST persons requiring assistance.

PROCEED to the Fire Department response point (outside) & report to the Fire Department.

### IF YOU HEAR A FIRE ALARM...

EVACUATE via the nearest safe exit.

ASSIST persons requiring assistance.

ASSEMBLE in the gravel sports field on the west side of the school clear of the school and arriving fire apparatus.

PHONE 9-1-1 to report a fire at **4850 Irmin Street, Burnaby, B.C.**

### GENERAL INFORMATION

While exiting, walk, and do not run. Shut all doors behind you and alert those who have difficulty hearing that an emergency evacuation of the development is under way. Proceed along corridors and through exits in a quiet and orderly manner. High-heeled shoes are hazardous while proceeding downstairs, and it is advisable to remove them before entering the stairwell. Do not push or jostle.

Assist persons requiring assistance to reach the nearest safe exit:

When you have reached the outside of the school and the parking lot, move away from the doorway to allow others behind you to emerge from the exit and proceed to the designated assembly area.

DO NOT RE-ENTER THE BUILDING FOR ANY REASON until you have been advised to do so by the Fire Department.

## USING A PORTABLE FIRE EXTINGUISHER

Portable fire extinguishers are useful only if you know how to use them, if they are right for the type of fire you are fighting, and if the fire is discovered immediately. You should not attempt to fight even a small fire until people have been evacuated from the area and the Fire Department has been called.

**Never** attempt to fight a fire if any of the following is true:

- ♦ You are uncertain about how to use the extinguisher.
- ♦ The fire is spreading beyond the immediate area where it started.
- ♦ The fire could block your escape route.
- ♦ You are alone.
- ♦ The Fire Department has been called.

To operate an extinguisher...Remember...

**PASS!**











(Pull – Aim – Squeeze – Sweep)

If fire breaks out again, repeat use of the extinguisher.



not

### CLASSIFICATION OF FIRE

CLASS OF FIRE	TYPE OF FIRE	APPROVED FIRE EXTINGUISHER
  Ordinary Combustibles	Wood, paper, cloth	Type A; Type A-B
  Flammable Liquids	Gasoline, paints, oils, grease	Type A-B; Type B-C; Type A-B-C
  Live Electrical Equipment	Electrical wiring, fuse box	Type B-C; Type A-B-C
  Combustible Metal	Metals	Bucket of Sand
  Commercial Cooking Equipment	Commercial cooking oil appliances	*Wet Chemical

## METHODS TO ASSIST PERSONS WITH PHYSICAL DISABILITIES

In most cases people with physical disabilities should be placed under the supervision of designated personnel until the Fire Department can rescue them. If it is life threatening for the people with physical disabilities and their supervisors to remain on that floor, it is recommended that the people with physical disabilities be transported via the stairwell to a grade level exit.

Below are some techniques which may be used to perform this transport:

### THE BACK PACK LIFT

The Rescuer would kneel at the front of the person being assisted and place the person's arms up and over the rescuer's shoulders and chest. The rescuer would then lean forward before raising slowly to a full standing position. (Figure 1)

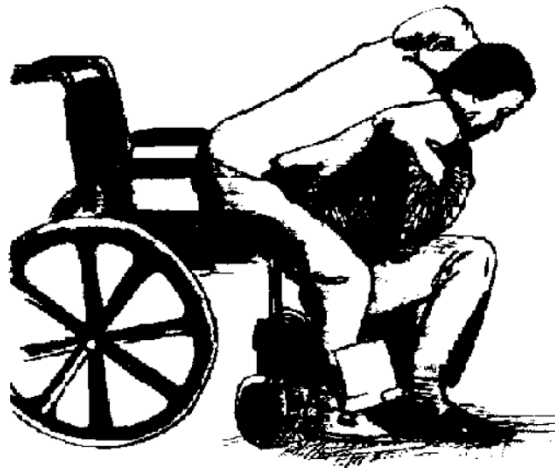


Figure 1

## TWO RESCUER EXTREMITIES CARRY

The person being assisted would be placed on the stairwell landing. One rescuer would lift at the legs, under the knees, while the other would lift under the shoulders with fingers locked across the individual's chest. Rescuers, with backs erect, would lift together, rising slowly to a standing position (Figure 2).



Figure 2

## TWO RESCUER SEAT CARRY

Two rescuers position themselves next to the wheelchair (or beside the person being assisted) in order to grasp each other's upper arm or shoulder (Figs. 3 & 4). The person being assisted would place his/her arms firmly around both rescuers' necks as per Fig. 5. The two rescuers would then lean forward placing their free arm under the individual's legs, firmly grasping each other's wrists as per Fig. 6. Working together, both rescuers lift, using legs, and carefully step forward.



Figure 3



Figure 4



Figure 5



Figure 6

These are but a few examples of transporting a person down a stairwell.

<p style="text-align: center;"><b>PART 4</b> <b>INSPECTION, TESTING &amp; MAINTENANCE OF FIRE</b> <b>PROTECTION EQUIPMENT</b></p>
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**GENERAL**

The B.C. Fire Code 2018 require that fire protection installations be maintained in operating condition in accordance with Division B Part 6. In most cases the Fire Code does not specify in detail the necessary inspection, maintenance, and testing procedures; instead, it references standards such as those developed by the National Fire Protection Association, Canadian Standards Association, and Underwriters Laboratories of Canada. Where such standards are referenced by the code, they have been identified in this plan as *Reference Standard*.

**RECORDS**

Records of inspection, testing or maintenance of fire protection equipment, which is completed by the Fire Safety Director, qualified person, or a private contractor shall be retained for at least 2 years from the date of the activity. The records shall be located in the Fire Safety Plan for review by the authority having jurisdiction. The activities on the Daily Inspection Report are exempted from this requirement.

**QUALIFIED CONTRACTORS**

Contractors may perform their own unique inspection and testing procedures; however, their procedures must meet the minimum requirements set by the applicable code. Information pertaining to such procedures is available in this Part so that the fire safety director has some idea of what the contractor should be doing.

It is required that contractors performing maintenance work other than weekly and monthly on fire protection systems must be technicians that are certified by the Applied Science Technologists and Technicians of B.C. A.S.T.T. Certified technicians must use A.S.T.T. approved maintenance forms; however, If the contractor's testing is significantly different from that which is identified in this part, the Fire Safety Director should seek advice from A.S.T.T. or the fire department.

All inspection tags and reports must be shown with the registered Fire Protection technician (RFPT) stamp.

## **PRECAUTIONS DURING MAINTENANCE, REPAIRS, ALTERATIONS, AND RENOVATIONS**

BC Fire Code, Division B, sentence 6.1.1.4 (1) – Protection during Shutdown – states:

“When any portion of a fire protection system is temporarily shut down, alternative measures shall be taken to ensure that protection is maintained.”

Interruption of normal operation of a fire protection system for any purpose constitutes a “temporary shutdown.” Types of interruptions include, but are not limited to, periodic inspection or testing, maintenance, and repairs. During a shutdown, alternative measures are necessary to ensure that the level of safety intended by the Code is maintained.

When a sprinkler system is shut down, measures that can be taken include the extra fire watch service and Full sprinkler protection shall be restored or the provisions of additional precautions during shutdowns shall be maintained when work on the system is temporarily discontinued, as at nighttime or during holidays.

## **INOPERABLE OR TEMPORARILY SHUTDOWN FIRE ALARM SYSTEM**

When the system cannot be repaired to full operation, the following precautions should be implemented:

- Notify the fire alarm monitoring company of the system status and develop alternative measures in cooperation with the fire department to ensure that, should a fire occur while the alarm system is out of service:
  - All persons in the building can be promptly informed
  - The fire department is notified.
- Notify the fire alarm monitoring company
- Notify all supervisory staff that the fire alarm system is temporarily shut down and review emergency evacuation procedures including notification procedures of all persons in the building.
- Appoint a fire watch to conduct a sequential tour of the building in areas normally served by fire detection devices (i.e., rooms or spaces protected by sprinklers, heat detectors, smoke detectors or some other form of fire detection devices). Persons conducting the fire watch would record their patrols and be provided some means of communication to notify the fire department in the event of a fire.

### TEMPORARY SHUTDOWN OF STANDPIPE SYSTEM

- Notify all supervisory staff that the standpipe system is temporarily shut down. Provide signage at the fire alarm annunciator that the standpipe is temporarily shut down.

### TEMPORARY SHUTDOWN OF SPRINKLER SYSTEM

- Provide signage at the fire alarm annunciator that the sprinkler system is temporarily shut down.
- Tag or identify closed sprinkler control valves in a manner apparent to the responding fire department.
- Notify all supervisory staff that the sprinkler system is temporarily shut down and the temporary precautions.
- Schedule the work on the sprinkler system to enable the system to be operational as quickly as is possible in the circumstances.
- Employ additional temporary precautions:
  - Where practicable, provide temporary water connections to the sprinkler system.
  - Provide emergency hose lines and portable extinguishers.
  - Have a fire watch patrol the area until the sprinkler system has been restored.
- Prohibit “Hot works” such as welding or cutting in the area where the sprinkler protection is impaired unless it can be limited to areas where precautions have been put into place.
- When work on the system is temporarily discontinued, such as at night time or during holidays, restore full sprinkler protection or maintain the provisions of additional precautions.

### TEMPORARY REMOVAL OF A PORTABLE FIRE EXTINGUISHER

Where a service company removes a fire extinguisher from the building for an extended length of time, a fire extinguisher of the same type should be provided temporarily in its place.

### BUILDING ALTERATIONS AND REPAIRS

During alterations and repairs ensure that the building and its occupants are not exposed to undue fire hazards created by contractors' equipment or supplies which are brought into the building. Frequent inspection of the affected area will occur in order to ensure the following:

- Exits are free of obstructions.
- Dangerous work areas are inaccessible to the building occupants

- Contractors have obtained necessary building and operation permits.
- Flammable and combustible liquids are handled and stored safely.
- Heat producing equipment such as welding/cutting equipment and portable heaters are used safely.
- Damage to fire separations (e.g., walls, doors & related hardware) are repaired.

Where a problem is suspected the Fire Department should be contacted in order to provide advice or perform an inspection.

## **PROCEDURES AFTER FIRE SAFETY EQUIPMENT HAS OPERATED**

### **FIRE DETECTION & ALARM SYSTEM**

Procedure for false alarm:

- ENSURE the fire department is aware of incident.
- DO NOT SILENCE OR RESET the fire alarm system
- When the fire department is satisfied that the alarm was false, RESTORE any activated manual pull stations and RESET the system (if qualified).
- COMPLETE the Incident/Activity Report.

Where a fire has occurred and damaged system wiring and/or detection devices, or you are unsure of the reset procedures, it is likely that “trouble” will be indicated on the system. In this case a qualified contractor should be contacted to make the necessary repairs.

### **WET AUTOMATIC SPRINKLER SYSTEM**

Where a sprinkler has activated during a fire condition or accidentally through mechanical damage it is necessary to place the system back in operation as soon as possible. This procedure should be conducted by a qualified sprinkler contractor and a qualified fire alarm contractor. A fire watch is to be established until the systems are reset.

### **PORTABLE FIRE EXTINGUISHERS**

When extinguishers have been used, they should be serviced by qualified personnel.

Where a service company needs to remove a Fire Extinguisher from the building, a replacement Fire Extinguisher of the same type shall be provided in its place.

### **FIRE WATCH**

A permit is not required for a fire watch. However, the Fire Chief or his designate may, at any time, require a fire watch. The fire watch shall not be stopped until the fire department provides authorization to discontinue the fire watch.

#### **Fire watch personnel shall:**

- Be able to communicate effectively.
- Have a reliable method of communicating an emergency to the public, staff and emergency services.
- Be thoroughly familiar with the area they are patrolling.

- Fire watch shall be performed by personnel solely dedicated to the fire watch and no other facility related activities or events.
- Patrol their area at least once each half hour (24-Hours a day).
- Make reports as instructed including suspicious persons on site. A written record of patrol rounds and any significant information shall be recorded in a logbook.
- Relay any special orders or pertinent information to relief personnel.
- Remain on duty and awake until properly relieved.
- Identify and correct hazards.
- Keep exits clear and obstruction free.
- Ensure firefighting equipment is in place and operational.
- Emergency access routes are kept clear.
- Ensure posted safety information is in place.
- Alert building occupants of an emergency and direct evacuation when required.

**RESPONSIBILITY:**

The owner, property manager, or project manager has the sole responsibility for the fire watch. The responsible party in conjunction with the authority having jurisdiction shall assign to the fire watch as many personnel as necessary and such person shall provide:

- A means of reliable communication to the fire department.
- Detailed instruction of the method, location, and frequency to be patrolled.
- Two-way radios to facilitate communication and evacuation.
- Instruction in the procedure for reporting emergencies to the fire department.
- A method of alerting building occupants and an evacuation procedure when two or more fire watch personnel are required.
- Any other instruction required by the authority having jurisdiction.

## PORTABLE FIRE EXTINGUISHERS

**Reference Standard:** BC Fire Code 2018, Article 6.2.1.1, NFPA 10, *Standard for Portable Fire Extinguishers*

An inspection of an extinguisher is a *quick check* that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. Maintenance is a *thorough check* of an extinguisher which is intended to give maximum assurance that an extinguisher will operate effectively and safely and will normally reveal the need for hydrostatic pressure testing. Recharging is the replacement of the extinguishing agent.

### Monthly Inspection

**Responsibility:** Fire Safety Director

#### Procedure:

Check portable fire extinguishers for the following:

- Located in designated place
- No obstruction to access or visibility
- Operating instructions on nameplate legible and facing outward
- Seals and tamper indicators not broken or missing
- Determine fullness by weighing or *hefting*
- Examine for obvious physical damage, corrosion, leakage, or clogged nozzle
- Pressure gauge reading or indicator in the operable range or position

**Record Keeping:** Monthly Inspection & Testing Report

- Serial number of extinguishers requiring maintenance should be recorded on report for qualified contractor

Fill-out extinguisher tag with following information:

- Date extinguisher was inspected
- Initials of person performing inspection

### Annual Maintenance

**Responsibility:** Contractor with ASTTBC certification

#### Procedure:

- Perform maintenance in accordance with the B.C. Fire Code Regulations and NFPA 10, including any necessary hydrostatic pressure testing.

**Record Keeping:** Annual Inspection & Testing Report

## MEANS OF EGRESS

**Reference Standard:** BC Fire Code 2018, Article 2.7.1

### Daily Inspection

**Responsibility:** Fire Safety Director

**Procedure:**

- Doors in fire separations shall be inspected to ensure that they remain closed and latched unless the door is equipped with an acceptable hold open device that will permit the door to close and latch automatically in the event of fire.
- Corridors used by the public and exits shall be maintained free of obstructions
- Exterior passageway and exterior exit stairs shall be maintained free of snow and ice accumulations.

**Record Keeping:** None

### Monthly Inspection

**Responsibility:** Fire Safety Director

**Procedure:**

- Doors in fire separations shall be operated to ensure that they are properly maintained. Doors equipped with a hold open device must release automatically in the event of a fire.

**Record Keeping:** Monthly Inspection & Testing Report

## FIRE DETECTION & ALARM SYSTEM

**Reference standard:** BC Fire Code 2018, Article 6.3.1.2. ULC S536, *Inspection and Testing of Fire Alarm Systems*.

### Daily Inspection

**Responsibility:** Fire Safety Director

**Procedure:**

- Check Fire Alarm AC power lamp
- Check Fire Alarm trouble lamps

**Record Keeping:** None

### Monthly Testing

**Responsibility:** Fire Safety Director

**Procedure:**

- Notify the alarm monitoring company, the Fire Department and the tenants that you are testing the system. Notify all parties when you have completed testing.
- Under emergency power, one manual alarm initiating device shall be operated on a rotation basis and shall initiate an alarm condition
- Intended function of all alarm audible signal appliances shall be ensured
- The annunciator panel shall be checked to ensure that the tested devices annunciate correctly
- Intended function of the audible and visual trouble signals shall be insured
- Fire alarm batteries shall be checked to ensure that:
  - Terminals are clean and lubricated where necessary
  - Terminal clamps are clean and tight where necessary
  - Electrolyte level and specific gravity, where applicable, are specified by the manufacturer

**Record Keeping:** Monthly Inspection & Testing Report

### Annual Service

**Responsibility:** Contractor with ASTTBC certification

**Procedure:**

Contractor shall perform service in accordance with ULC S536

**Record Keeping:** Annual Inspection & Testing Report

## EMERGENCY LIGHTING UNITS

**Reference Standard:** *B.C. Fire Code 2018, Article 2.7.3.1*

### Monthly Inspection

**Responsibility:** Fire Safety Director

#### Procedure:

- Self-contained emergency lighting unit equipment shall be inspected to ensure that:
  - pilot lights are functioning and not obviously damaged or obstructed,
  - the terminal connections are clean, free of corrosion and lubricated when necessary,
  - the terminal clamps are clean and tight as per manufacturer=s specifications, and
  - the battery surface is kept clean and dry.

**Record Keeping:** Monthly Inspection and Testing Report

### Monthly Testing

**Responsibility:** Fire Safety Director

#### Procedure:

- Self-contained emergency lighting unit shall be tested at intervals not greater than one month to ensure that the emergency lights will function upon failure of the primary power supply.

**Record Keeping:** Monthly Inspection & Testing Report

### Annual Testing

**Responsibility:** Contractor with ASTTBC certification

#### Procedure:

- Self-contained emergency lighting unit equipment shall be tested at intervals not greater than twelve months to ensure that the unit will provide emergency lighting for a duration equal to the design criterion under simulated power failure conditions. Minimum operating time of 30 minutes.
- After completion of the test, the charging conditions for voltage and current and the recovery period shall be tested to ensure that the charging system is functioning in accordance with the manufacturer's specifications.

Note: Operation time for units is as follows:

- 60 minutes for Group B occupancies not within the scope of Development Code Subsection 3.2.6.
- 30 minutes for a development of any other occupancy.

**Record Keeping:** Annual Inspection and Testing Report

## SPRINKLER SYSTEM

**Reference Standard: BC Fire Code 2018 - Article 6.4 to N.F.P.A. #25 Standards for Inspection, Testing and Maintenance of Automatic Sprinkler Systems**

Notification – Prior notification of waterflow or other tests to be made to a sprinkler system shall be given to parties who could be affected by an alarm.

### Daily Inspection

**Responsibility: Fire Safety Director**

#### Procedures:

- Dry-pipe valve rooms or enclosures in unheated development shall be inspected at intervals not greater than 24 hours during periods of freezing weather and measures shall be taken to ensure that the temperature of the room or enclosure is maintained above 4 degrees C.

### Record Keeping:

### Weekly Inspection

**Responsibility: Fire Safety Director**

#### Procedures:

- Valves controlling sprinkler water supplies or alarms shall be inspected at intervals not greater than 7 days to ensure that they are in the open position.

Note: For valves locked in the open position see Monthly Inspection & Test.  
For electrical supervised valves see Bi-monthly Test & Inspection.

- Dry pipe system air pressure shall be read at intervals not greater than 7 days and the system shall be maintained at the required pressure.

**Record Keeping:** Weekly Inspection Report

## **Monthly Inspection & Tests**

**Responsibility:** Fire Safety Director

### **Procedures:**

- When the alarm line discharge is subject to freezing, waterflow alarm tests using the alarm test connection located at the sprinkler valve shall be performed on sprinkler systems at intervals not greater than one month. (This test operates mechanical or electrical gong.)

On monitored system, the water flow actuated devices may be tested every two months. See Bi-monthly Test and Inspection.

- On electrically supervised systems, the water flow actuated devices may be tested annually. See Annual Tests and Maintenance.
- Valves which are locked open shall be inspected at intervals not greater than one month.
- Check the priming water supply for dry-pipe systems to ensure that it is at the proper level above the dry-pipe valve.

**Record Keeping:** Monthly Inspection & Testing Report

## **Bi-monthly Test and Inspection**

**Responsibility:** Fire Safety Director

### **Procedures:**

#### *All Sprinkler Systems*

- Transmitters & water flow actuated devices shall be tested at intervals not greater than 2 months for system connected to electrical supervisory signal service. (Example, fire alarm system or central station monitoring service.)
- Inspect all electrically supervised control valves.

**Record Keeping:** Bi-monthly Testing Report

## Semi-annual Tests

**Responsibility:** Contractor with ASTTBC certification

### Procedures:

All Systems

- Gate valve supervisory switches, tank water level devices, development and tank water temperature supervisory devices and other sprinkler supervisory devices shall be tested at intervals not greater than 6 months.

**Record Keeping:** Semi-Annual Inspection & Testing Report

## Annual Tests & Maintenance

**Responsibility:** Contractor with ASTTBC certification

### Procedures:

Wet Systems

- Waterflow alarm tests using the inspector=s test connection shall be performed on wet pipe sprinkler systems at intervals not greater than twelve months.

All Systems

- Waterflow tests using the main drain shall be conducted at intervals not greater than 12 months to ensure that water supply available has not deteriorated.
- Drainage facilities shall be tested to ensure that the drains are capable of taking the full flow from the main drain pipe without causing damage.
- Sprinkler control valves are accessible.
- Pits containing sprinkler control valves are free of water and protected from freezing.
- Sprinkler piping and hangers are in good repair.
- Sprinklers are inspected for damage, corrosion or accumulations of grease, paint or other deposits and are replaced where such conditions would impair the operation of the sprinkler.
- Spare sprinklers shall be checked to ensure that the stock on hand is not less than:
  - 6 spare sprinklers (not more than 300 sprinklers)
  - 12 spare sprinklers (between 301 - 1 000 sprinklers)
  - 24 spare sprinklers (more than 1 000 sprinklers)

- Spare sprinklers shall correspond to the types and temperature ratings of the sprinklers in use.
- A sprinkler wrench shall be kept in the cabinet where the spare sprinklers are stored.

**Record Keeping:** Annual Inspection & Testing Report

**Five Year Test**

**Responsibility:** **Contractor with ASTTBC certification**

**Procedures:** Water flow shall be tested with the control valve fully open using the inspector's test pipe.

**Record Keeping:** Five Year Testing Report

**Fifty Year Test**

**Responsibility:** **Contractor with ASTTBC certification**

**Procedure:**

1. Sample sprinklers from sprinkler systems which have been in service more than 50 years shall be sent to a recognized testing laboratory for testing, and this procedure shall be repeated at intervals not greater than 10 years thereafter.
2. When sprinklers are required to be tested in conformance with Sentence (1), no fewer than 6 sprinklers of each type shall be tested, except that no fewer than 2 sprinklers per floor per individual system shall be tested.
3. All sprinklers shall be replaced in sprinkler systems from which sample sprinklers have been tested and found defective.

**Record Keeping:** Fifty Year Test Report

## **FIRE DAMPERS & FIRE STOPS FLAPS**

**Reference Standard:** BC Fire Code 2018 Article 2.2.2.4.

### **Annual Inspection**

**Responsibility:** Contractor with ASTTBC certification

#### **Procedure:**

- ensure that the fire dampers and fire stops are in place and are not obviously damaged or obstructed.

**Record Keeping:** Annual Inspection and Testing Report.

## **HOODS, DUCTS & FILTERS**

### **Weekly Inspection**

**Responsibility:** Fire Safety Director

#### **Procedure**

- 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.
- If necessary, hoods and filters shall be cleaned by staff.
- If necessary, ducts shall be cleaned by a qualified contractor.

**Record Keeping:** Weekly Inspection & Testing Report - when equipment is cleaned.

## HEATING VENTILATING & AIR CONDITIONING SYSTEMS

**Reference Standard:** BC Fire Code 2018, Article 2.6.1.6.

### Annual Testing and Servicing

**Responsibility:** Contractor with ASTTBC certification

#### Procedure:

- Inspect and service as necessary to ensure that these systems do not create a fire hazard.
- Except for self-contained systems within dwelling units, disconnect switches for mechanical air-conditioning and ventilating systems shall be operated to establish that the system can be shut down in an emergency.

**Record Keeping:** Annual Inspection & Testing Report.

## FIRE DEPARTMENT ACCESS TO DEVELOPMENT

**Reference Standard:** BC Fire Code 2018, Article 2.5.1.1.

### Daily Inspection

**Responsibility:** Fire Safety Director

- Streets, yards and roadways provided for fire department access shall be maintained so as to be ready for use at all times by fire department vehicles.
- Vehicles shall not be parked to obstruct access of fire department vehicles and signs shall be posted prohibiting such parking.
- Access panels or windows provided to facilitate access for firefighting operations shall be maintained free of obstructions at all times.

**Record Keeping:** None

**PART 5  
REPORTS AND CHECKLISTS**

**INCIDENT/ACTIVITY REPORT**

**(1) INCIDENT/ACTIVITY**

- |  |   |
|--|---|
| <input type="checkbox"/> FIRE                | <input type="checkbox"/> FALSE ALARM          |
| <input type="checkbox"/> FIRE DRILL          | <input type="checkbox"/> TRAINING             |
| <input type="checkbox"/> FIRE SAFETY MEETING | <input type="checkbox"/> FIRE EQUIP. OPERATED |

**(2) DETAIL**

DATE \_\_\_\_\_ TIME \_\_\_\_\_ DEVICE/EQUIP \_\_\_\_\_  
 FLOOR \_\_\_\_\_ ALARM ZONE \_\_\_\_\_ # OF INJURIES \_\_\_\_\_  
 CAUSE/REASON FOR INCIDENT \_\_\_\_\_  
 EXPLAIN DAMAGE/LOSS \_\_\_\_\_

**(3) ACTION**

WHO DISCOVERED THE FIRE? \_\_\_\_\_  
 DID FIRE DEPT ATTEND? \_\_\_\_\_ IF NOT, WHY? \_\_\_\_\_  
 WHO OPERATED FIRE EQUIPMENT? \_\_\_\_\_

**(4) COMMENTS / RECOMMENDATIONS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ SIGNED \_\_\_\_\_  
 DATE \_\_\_\_\_

**(5) DISTRIBUTION LIST**

- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> FIRE DEPARTMENT             | <input type="checkbox"/> HEAD OFFICE |
| <input type="checkbox"/> DEPUTY FIRE SAFETY DIRECTOR | <input type="checkbox"/> TENANTS     |
| <input type="checkbox"/> INSURANCE COMPANY           | <input type="checkbox"/> POLICE      |

**DAILY INSPECTION REPORT**

**RESPONSIBILITY: Fire Safety Director**

**COMMON PUBLIC AREAS**

- No flammable or combustible liquid storage
- No combustible - refuse accumulations
- No worn electrical extension cords
- No oily or stain - soaked rags

**MEANS OF EGRESS**

- Doors in fire separations are operable
- Corridors & exits are clear of obstructions
- Exterior landings and routes leading away from the development are clear of obstructions including snow and ice.

**FIRE DETECTION & ALARM SYSTEM**

- Fire alarm A/C power lamp is on
- Fire alarm not indicating trouble

**FIRE DEPARTMENT ACCESS TO DEVELOPMENT**

- Access routes are clear of obstructions

**SPRINKLER SYSTEM**

- Valve enclosures protected from freezing

**WEEKLY INSPECTION & TESTING REPORT**

**RESPONSIBILITY: Fire Safety Director**

WEEK

1 2 3 4

Hoods, Filters, & Ducts

Sprinkler System

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER MONTH

**MONTHLY INSPECTION & TESTING REPORT**

**RESPONSIBILITY: Fire Safety Director**

- Portable Fire Extinguishers

Record the serial number of each extinguisher requiring maintenance by a qualified contractor:

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_  
(4) \_\_\_\_\_ (5) \_\_\_\_\_ (6) \_\_\_\_\_  
(7) \_\_\_\_\_ (8) \_\_\_\_\_ (9) \_\_\_\_\_

- Means of Egress
- Fire Detection & Alarm System
- Pull station location
- Sprinkler System
- Emergency Lighting Units

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER MONTH

**BI-MONTHLY TESTING REPORT**

**RESPONSIBILITY: Fire Safety Director**

MONTHS

2	4	6	8	10	12

Sprinkler System

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER YEAR
- RETAIN COPY OF CONTRACTORS TEST REPORTS

**SEMI-ANNUAL TESTING REPORT**

**RESPONSIBILITY: Contractor with ASTTBC certification**

**MONTHS**

**6      12**

- Sprinkler System
- Smoke Alarm

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER YEAR
- RETAIN COPY OF CONTRACTORS SERVICE REPORT

ANNUAL INSPECTION & TESTING REPORT

**RESPONSIBILITY: Contractor with ASTTBC certification**

- Portable Fire Extinguishers
- Fire Detection & Alarm System
- Emergency Lighting Units
- Sprinkler System - Static Pressure: \_\_\_\_\_ -Residual Pressure: \_\_\_\_
- Fire Dampers and Fire Stop Flaps
- Heating, Ventilating & Air conditioning
- Automatic Heat Tape

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER YEAR
- RETAIN COPY OF **CONTRACTORS** REPORT

FIVE YEAR TEST REPORT

**RESPONSIBILITY: Contractor with ASTTBC certification**

YEARS

2028

Sprinkler System

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER FIFTY YEAR PERIOD
- RETAIN COPY OF CONTRACTORS TEST REPORT
- FIVE YEAR TEST WILL BE REQUIRED IN: \_\_\_\_\_

FIFTY YEAR TEST REPORT

**RESPONSIBILITY: Contractor with ASTTBC certification**

YEARS

2073

Sprinkler System

- PROCEDURES IN ACCORDANCE WITH PART 4
- ONE FORM PER FIFTY YEAR PERIOD
- RETAIN COPY OF CONTRACTORS TEST REPORT
- FIFTY YEAR TEST WILL BE REQUIRED IN: \_\_\_\_\_

## PART 6 LEGAL BASIS FOR FIRE SAFETY PLANNING

### GENERAL

The 2018 BC Fire Code, Division C, Part 2 (Administrative Provisions), Sentence 2.2.1.1 (1) states “Unless otherwise specified, the **owner or the owner’s authorized agent** shall be responsible for carrying out the provisions of this code.

- One such provision is the preparation, implementation and maintenance of a Fire Safety Plan (FSP) when required by the BC Fire Code.
- Our building and property are required to have a Fire Safety Plan in conformance with the 2018 BC Fire Code Division B, Article 2.8.1.1. It has been prepared to meet the requirements of Subsection 2.8.2 and any other applicable fire safety plan requirements due to our specific operation.
- Articles, in other sections of Division B identify additional specific items that exist in our operation, required additional information in our FSP. They include but not limited to:
  - Article 2.8.2.4- additional information for high buildings within the scope of BC Building Code subsection 3.2.6.
  - Article 4.3.14.5- additional information for storage tanks containing flammable or combustible liquids.
- Our FSP must meet all the requirements of the applicable sections in the BC Fire Code. We have vested interest in promoting fire safety in return for resources used to develop a FSP, our incidence and impact of fire will be reduced. The FSP is crucial for building Occupants and public safety; it is much more than a template document produced designed to meet a regulatory requirement. To that end, fire official recommended we use experienced and trained contractor or other individuals who is familiar with the content and design of FSP.
- Our Fire Safety Director with intimate knowledge of the workings and hazards associated with our facility or operation was involved to ensure specific issues related to our business were addressed.
- The completed FSP was reviewed by the local fire department. A copy is retained on the site in a location accepted by our local fire department. We are responsible for implementing all aspects of our FSP, for keeping it current and applicable at all times, and for ensuring our employees are well trained in its expectations.

**EXCERPT FROM 2018 B.C. FIRE CODE – SECTION 2.8****6.2.1 Article 2.8.1.1 Application****2.8.1. General****2.8.1.1. Application**

- 1) Fire emergency procedures conforming to this Section shall be provided for
  - a) every *building* containing an *assembly, care, treatment or detention occupancy*,
  - b) every *building* required by the British Columbia Building Code to have a fire alarm system,
  - c) demolition and construction sites regulated under Section 5.6.,
  - d) storage areas required to have a fire safety plan in conformance with Articles 3.2.2.5. and 3.3.2.9.,
  - e) areas where *flammable liquids* or combustible liquids are stored or handled, in conformance with Article 4.1.5.5., and
  - f) areas where hazardous processes or operations occur, in conformance with Article 5.1.5.1.

**2.8.1.2. Training of Supervisory Staff**

- 1) *Supervisory staff* shall be trained in the fire emergency procedures described in the fire safety plan before they are given any responsibility for fire safety.  
(See Note A-2.8.1.2. (1).)

**2.8.1.3. Keys and Special Devices**

- 1) Any keys or special devices needed to operate the fire alarm system or provide access to any fire protection systems or equipment shall be readily available to on-duty *supervisory staff*.

**2.8.2. Fire Safety Plan****2.8.2.1. Measures in a Fire Safety Plan**

- 1) In *buildings* or areas described in Article 2.8.1.1., a fire safety plan conforming to this Section shall be prepared in cooperation with the fire department and other applicable regulatory authorities and shall include
  - a) the emergency procedures to be used in case of fire, including
    - i) sounding the fire alarm (see Note A-2.8.2.1. (1)(a)(i)),
    - i) notifying the fire department,
    - ii) instructing occupants on procedures to be followed when the fire alarm sounds,
    - iii) evacuating occupants, including special provisions for persons requiring assistance  
(see Note A-2.8.2.1. (1)(a)(iv)),
    - iv) confining, controlling and extinguishing the fire,
  - b) the appointment and organization of designated *supervisory staff* to carry out fire safety duties,

- c) the training of *supervisory staff* and other occupants in their responsibilities for fire safety,
- d) 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
- g) the inspection and maintenance of *building* facilities provided for the safety of occupants.

(See Note A-2.8.2.1. (1).)

- 2) The fire safety plan shall be reviewed at intervals not greater than 12 months to ensure that it takes account of changes in the use and other characteristics of the *building*.

#### **2.8.2.2. Care, Treatment and Detention Occupancies**

- 1) A sufficient number of *supervisory staff* shall be on duty in *care, treatment* and *detention* occupancies to perform the tasks outlined in the fire safety plan described in Clause 2.8.2.1.(1)(a). Part 2 – Building and Occupant Fire Safety Division B: Acceptable Solutions

#### **2.8.2.3. Assembly Occupancies**

- 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 in Clause 2.8.2.1.(1)(a) whenever the *building* is open to the public.

#### **2.8.2.5. Retention of Fire Safety Plans**

- 1) The fire safety plan shall be kept in the *building* for reference by the fire department, *supervisory staff* and other personnel.
- 2) The fire safety plan for a *building* within the scope of Subsection 3.2.6. of Division B of the British Columbia Building Code shall be kept at the central alarm and control facility.
- 3) The fire safety plan for a *building* or facility within the scope of Sections 3.1., 4.1., and 5.1. shall be kept at the principal entrance to the *building* or facility.

#### **2.8.2.6. Distribution**

- 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. Posting of Fire Emergency Procedures**

- 1) At least one copy of the fire emergency procedures shall be prominently posted on each *floor* area.
- 2) In every hotel and motel bedroom, the fire safety rules for occupants shall be posted showing the locations of exits and the paths of travel to exits.
- 3) Where a fire alarm system has been installed with no provisions to transmit a signal to the fire department, a sign shall be posted at each manually actuated

signaling box requesting that the fire department be notified and including the telephone number of that department.

- 4) All *buildings* served by one or more elevators shall have at each elevator entrance on each floor level, a permanently mounted fire safety sign or symbol indicating that the elevator is not to be used in case of fire.
- 5) The sign or symbol required by Sentence (4) shall be at least 100 mm in height and width and shall be designed in accordance with NFPA 170, "Standard for Fire Safety and Emergency Symbols."

### 2.8.3. Fire Drills

#### 2.8.3.1. Fire Drill Procedures

- 1) The procedure for conducting fire drills shall be determined by the person in responsible charge of the *building*, taking into consideration
  - a) the *building occupancy* and its fire hazards,
  - b) the safety features provided in the *building*,
  - c) the desirable degree of participation of occupants other than *supervisory staff*,
  - d) the number and degree of experience of participating *supervisory staff*,
  - e) the features of fire emergency systems installed in *buildings* within the scope of Subsection 3.2.6. of Division B of the British Columbia Building Code, and
  - f) the requirements of the fire department.

(See Note A-2.8.3.1. (1).)

#### 2.8.3.2. Fire Drill Frequency

- 1) Except as provided in Sentence (2), fire drills as described in Sentence 2.8.3.1.(1) shall be held at intervals not greater than 12 months for the *supervisory staff*, *except that*
  - a) in day-care centers and in Group B *major occupancies*, such drills shall be held at intervals not greater than one month,
  - b) in schools attended by children, total evacuation fire drills shall be held at least 3 times in each of the fall and spring school terms, and
  - c) in *buildings* within the scope of Subsection 3.2.6. of Division B of the British Columbia Building Code, such drills shall be held at intervals not greater than 2 months.
- 2) Fire drills in a laboratory shall be held at intervals not greater than 3 months.

## PART 7 DEFINITIONS

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

**Alarm signal** – an audible signal transmitted throughout a zone or zones or throughout a building to advise occupants that a fire emergency exists.

**Alert signal** – an audible signal to advise designated persons of a fire emergency.

**Approved** – approval by the authority having jurisdiction (AHJ).

**Area of Refuge** – a space that facilitates a safe delay in egress, is sufficiently protected from fire conditions developing in the floor area and provides direct access to an exit or fire fighters' elevator.

**Authority Having Jurisdiction** – includes the fire commissioner, inspectors, and local assistants to the fire commissioner.

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

**Building Heights** – the overall height of a building from the first storey to the roof.

**Class A fire** – a fire involving combustible materials such as wood, cloth and paper.

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

**Class C fire** – a fire involving energized electrical equipment.

**Class "D" fire** – a fire involving a combustible metal.

**Class "K" fire** – a fire involving fryers and cooking appliances that involve combustible cooking media, vegetable or animal oils and fat.

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

**Combustible Construction** – that type of construction that does not meet the requirements for non-combustible construction.

**Combustible liquid** – any liquid having a flash point at or above 37.8 C° and below 93.3 C°.

**Deputy Fire Safety Director** – appointed supervisory staff member who assumes the duties of the Fire Safety Director during his/her absence.

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

**Exit** – that part of a means of egress that leads from the floor area it serves, including any doorway leading directly from a floor area to an open public thoroughfare or to an exterior open space thoroughfare.

**Fire Alarm System** – a device or combination of devices designed to warn occupants of a building of a fire.

**Fire code** – refers to the British Columbia Fire Code (current edition), pursuant to the Fire Services Act.

**Fire Damper** – a closure which consists of a damper installed in an air distribution system or a wall or floor assembly, which is normally held open but designed to close automatically in the event of a fire in order to maintain the integrity of a fire separation.

**Fire Detector** – a device which detects a fire condition and automatically initiates an electrical signal to actuate an alert signal or an alarm signal and includes heat detectors and smoke detectors.

**Fire Safety Director** – the person designated by the Building Management to implement and maintain the Fire Safety Plan.

**Fire Safety Plan** – a plan which provides occupant information for control of fire hazards, maintenance of fire protection systems, and evacuation procedures for their building.

**Fire protection systems** – a general term used in this document which includes sprinkler and fire alarm systems, hose stations, portable fire extinguishers, fire dampers, emergency lights, exit signs, fire doors, smoke control equipment, and voice communication systems.

Fire Separation – a construction assembly that acts as a barrier against the spread of fire.

**Fire stop flap** – a device intended for use in horizontal assemblies required to have a fire resistance rating and incorporating protective ceiling membranes, which operates to close off a duct opening through the membrane in the event of a fire.

**Fire Suppression System** – a device or combination of devices designed to extinguish or support extinguishment of fire.

**Fire Watch** – a procedure where a person is responsible to patrol a building or site and to sound an alarm in case of fire, or conduct such duties as required by the Fire Chief.

**Firewall** – a type of fire separation of non-combustible construction which subdivides a building or separates adjoining buildings to resist the spread of fire and which has a fire resistance rating as prescribed in the B.C. Building Code and has structural stability to remain intact under fire conditions for the required fire-rated time.

**Flammable liquid** – any liquid having a flash point below 37.8 C° and having a vapour pressure not exceeding 275.8 kPa (absolute) at 37.8 C°.

**Flash Point** – the minimum temperature at which a liquid within a container gives off vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

**Floor Area** – the space on any storey of a building between exterior walls and required firewalls, including the space occupied by interior walls and partitions, but not including exits, vertical service spaces, and their enclosing assemblies.

**Floor of Activation** – the floor from which the fire alarm system was activated.

**Flue** – an enclosed passageway for conveying flue gases

**Flue pipe** – refers to the pipe connecting the flue collar of an appliance to a chimney.

**Fire dampers** – a device intended for use in horizontal assemblies required to have a fire-resistance rating and incorporating protective ceiling membranes, which operates to close off a duct opening through the membrane in the event of a fire.

**Major Occupancy** – the principal occupancy for which a building or part thereof is used or intended to be used and shall be deemed to include the subsidiary

occupancies that are an integral part of the principal occupancy. The major occupancy classifications used in this Code are as follows:

**A1** - Assembly occupancies intended for the production and viewing of the performing arts

**A2** - Assembly occupancies not elsewhere classified in Group A

**A3** - Assembly occupancies of the arena type

**A4** - Assembly occupancies in which the occupants are gathered in the open air

**B1** - Care or detention occupancies in which persons are under restraint or are incapable of self-preservation because of security measures not under their control

**B2** - Care or detention occupancies in which persons having cognitive or physical limitations require special care or treatment

**C** - Residential occupancies

**D** - Business and personal services occupancies

**E** - Mercantile occupancies

**F1** - High-hazard industrial occupancies

**F2** - Medium-hazard industrial occupancies

**F3** - Low-hazard industrial occupancies

**Means of egress** – a continuous path of travel provided by a doorway, hallway, corridor, exterior passageway, balcony, lobby, stair, ramp, or other egress facility or combination thereof, for the escape of persons from any point in a building, room, or contained open space to a public thoroughfare or other acceptable open space (means of egress includes exits and access to exits).

**Non-combustible Construction** – that type of construction in which a degree of Fire Safety is attained by the use of non-combustible materials for structural members and other building assemblies.

**Qualified Contractor** – a specific service agency, trained industrial safety personnel or maintenance personnel.

**Generally** – any trained person with proper equipment

**Sprinklered** (as applying to a building or part thereof) – means that the building or part thereof is equipped with a system of automatic sprinklers.

**Supervisory staff** – those occupants of a building who have been appointed to take responsibility for some aspect of the fire safety plan (Fire Safety Director & Deputies).

**Wet Sprinkler System** – a fire sprinkler system which has sprinkler supply piping containing water. Such a system cannot be installed in areas subjected to freezing conditions as water is always in the sprinkler piping.

**Zone** – an area of a building designated as part of a fire alarm system or sprinkler system.

## **ABBREVIATIONS**

**CSA:** Canadian Standards Association

**NFPA:** National Fire Protection Association

**ULC:** Underwriters Laboratories of Canada

## APPENDIX

### HOT WORK POLICY AND PROCEDURE

#### Preamble

We are committed to a workplace free of injuries. That commitment is partly met by this Hot Work policy which ensures that employees, contractors and visitors to the operation are protected from the potential from related injuries and that site property and product are protected. It is required that all employees and contractors to our operations familiarize themselves with our policies and adhere to those policies, including the Hot Work Policy.

#### Policy

This policy was developed to ensure that the Hot Work will be managed, and proper actions are taken to prevent loss due to fire caused by Hot Work activities. Hot Work is defined as any operation that can produce enough heat from flame, spark or other source of ignition, with sufficient energy to ignite flammable vapors, gases, or dust. Hot work usually involves activities like welding, cutting, grinding, brazing, flaming, chipping, air gouging, riveting, drilling, and soldering.

All affected employees and contractors will receive instruction as to the expectations of them to ensure compliance with this policy.

Whenever possible, hot work activities will be conducted in the workshop's designated area that is free of combustible and flammable contents, with walls, ceilings and floors of non-combustible construction or lined with non-combustible materials.

A fire watch is not required for hot work activities performed in the designated area but is required everywhere else.

#### Scope

The provisions set out in this policy apply to any hot work done on and is to be strictly adhered to by all parties. The use of a Hot Work Permit when that hot work takes place away from the designated hot work areas is mandatory.

The Hot Work policy and procedures have also been developed to comply with:

- the BC Fire Code,
- the Occupational Health and Safety Regulation, and
- the BC Safety Standards Regulation and related.

## Responsibilities

### Management

- To ensure that all employees involved in the Hot Work Process are trained (including Permit Authorizing Individual (PAI), Hot Work Operator (HWO), and Fire Watch (FW)). This responsibility is assigned to the Human Resources Manager.
- Conduct periodic audits to ensure compliance with this policy. This responsibility assigned to our Health and Safety Manager.
- Communicate any changes to this policy with respect to regulation and interpretation. This responsibility assigned to our Health and Safety Manager.
- Ensure that the policy is reviewed annually and is current with all applicable regulations. This responsibility assigned to our Health and Safety Manager.

### Permit Authorizing Individual (PAI)

- Assess the work area and sign the Hot Work Permit PRIOR to work commencing. Copy of Hot Work Permit is attached at the end of this policy document.
- Post one part of permit at job site and place top copy of permit at the site designated area. (i.e., permit board).
- Ensure at least one worker tasked to perform hot work is trained as a HWO.
- Assign a worker trained as a FW, including use of portable fire extinguishers, to fire watch duties as described below –The Fire Watch.
- Provide FW with:
  - 10lb portable fire extinguisher and other firefighting equipment (e.g., pail of water, bucket of sand, fire hose)
  - Means of communication (e.g., cell phone, radio)
  - Location of nearest air horn and air horn protocols
  - Authority to stop hot work activity if unsafe conditions develop
- Ensure sprinkler systems are in working order monitoring once per hour for minimum of 6 hours or longer as determined. Ensure alternate measures are used if the Hot Work requires the temporary shutdown of our fire protection equipment or systems. Alternate measures shall be developed in consultation with our Health and Safety Manager, documented and attached to the Hot Work Permit.
  - Notify our local fire department that our fire protection will be shut off so they can plan accordingly.

- Notify our alarm service agency.
- Request local fire department standby if there is a severe fire/explosion hazard associated with the hot work activity.
- After completion of Hot Work ensure continuous monitoring for a minimum of 60 minutes or longer as determined by the PAI. PAI will consider having the area inspected every 30 minutes over the next 3 hours. This function may be performed by the designated FW, Plant Security Guard, Machine Operator or maintenance person. The PAI will conduct a final inspection of the hot work area 4 hours after the completion of the work.
- At the end of the monitoring period, the PAI collects the completed forms and delivered to the front office clerk for filing.

**Person Performing Hot Work – Hot Work Operator (HWO)**

- The HWO must verify that a hot work permit is in place before starting Hot Work. The permit is issued for one location only and is valid for no longer than 24 hours. It may become invalid if conditions change (e.g., adverse environmental condition).
- The HWO is responsible for complying with all rules and regulations concerning safe work practices and all requirements stated on the permit.
- Before performing the hot work, the HWO will examine the hot work equipment for leakage, defects or other state of repair issues. Identified issues will be addressed prior to use and, if necessary, by a qualified person.

**The Fire Watch (FW) worker**

- Required if hot works is performed outside of the workshop's designated area.
- Assess 15 meters (50 feet) radius for potential fire hazards.
- Assist HWO in preparation and clean-up of Hot Work area 15 meters (50 feet):
  - Cover or close openings in walls, floors, or ceilings to prevent passage of sparks to adjacent areas.
  - Protect against ignition combustible and flammable materials that can't be moved (e.g., wet down surrounding areas including lower floors and beams if applicable).

# HOT WORKING PERMIT

**HOT WORK PERMIT**

## WARNING!

**Instructions**

1. Person doing hot work: Indicate time started and post permit at hot work location. After hot work, indicate time completed and leave permit posted for Fire Watch.
2. Fire Watch: Prior to leaving area, do final inspection, sign, leave permit posted and notify Permit-Authorizing Individual.
3. Monitor: After 6 hours, do final inspection, sign, and return to designated area.

**Who, When, and Where?**

Hot Work Being Done By  
 Employee  
 Contractor

Date Job/Work Order No.

Location/Building and Floor

Nature of Job/Object

Name of Hot Work Operator(s) (HWO)

I verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and permission is authorized for work.

Signature of Permit-Authorizing Individual (PAI)

Time Started  AM  PM  
 Expiration Date

Time Finished  AM  PM  
 Expiration Time  AM  PM

Work area and all adjacent areas to which sparks and heat might have spread were inspected during the fire watch period and were found fire safe.

Signature of Fire Watch (FW) Time

Work area was monitored for a minimum of 6 hours following hot work and found fire safe.

Signature of Monitor Time

### HOT WORK IN PROGRESS WATCH FOR FIRE!

**Required Precautions Checklist**  
*(must be retained as record of hot work activity for 6 months minimum)*

Available Sprinklers in Normal Automatic mode and valve open.  
 Hot Work equipment in good repair.

Assess 15m (50 ft) radial "sphere" of work for potential fire hazards:

Floors, work level and below, cleaned or protected.  
 All other combustibles removed or shielded from sparks.

- Clean horizontal surfaces (e.g. building structures, equipment, ducts, cable trays, etc.) above and below where possible.
- Remove flammable liquids, dust, lint, combustible waste, oil deposits, etc., where possible.
- If removal/cleaning is impractical, protect with fire-retardant covers, shield with fire-retardant guards and/or curtains.

Transmission or conveying of sparks to adjacent areas eliminated or protected.

- Tightly cover wall/floor opening with fire-retardant material.
- Where openings cannot be sealed, suspend fire-retardant tarpaulins to help protect areas beneath.
- Isolate or shut down fans and conveyors to prevent the capturing and conveying sparks to other areas.

Explosive atmosphere eliminated or potential not present.

Work on walls, ceilings or enclosed equipment:

Construction materials verified as non-combustible and without combustible covering or insulation.  
 Combustibles on other side of walls relocated or protected.  
 Enclosed equipment cleaned and protected from all combustibles.  
 Containers purged of flammable liquids/vapours.

Fire watch/hot work area monitoring requirements:

Continuous fire watch provided during and for at least 60 minutes after hot work, including all breaks.  
 Fire watch supplied with suitable extinguishers/hoses.  
 Fire watch trained in the use of fire equipment and sounding alarm.  
 Area to be monitored hourly for a minimum of 6 hours after job is completed, or longer if required.

Other precautions that may be required:

Fire watch provided for adjoining areas, above, or below.  
 Confined Space or Lock-Out-Tag-Out required/used.  
 Area smoke or heat detection disabled to eliminate false trip.  
 Alternate measures for temporary shut down of fire protection equipment.

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

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

THIS PERMIT IS GOOD FOR  
24 HOURS ONLY

**HOT WORK PERMIT**

**WARNING!**

**HOT WORK IN PROGRESS  
WATCH FOR FIRE!**

IN CASE OF EMERGENCY:

CALL:

AT:

**WARNING!**

FIRE WATCH/MONITOR RECORD

DATE:

FIRE WATCH – Continuous (Start until 1 hr post-completion)			Post Completion MONITORING (Hourly for 5 more hours)		
	Time	Checked by: (Initials)		Time	Checked by: (Initials)
Start:			Post 2 hrs		
Finish:			Post 3 hrs		
Post 1-hr:			Post 4 hrs		
			Post 5 hrs		
			Post 6 hrs		

## **ALTERNATIVE SOLUTIONS**

N/A