

**National Fire Code
2023 Alberta
Edition Sec. 2.8**



**City of
Lethbridge
Fire Prevention**



Fire Safety Plan

Note This is a **generic template** so some items listed will not pertain to all buildings

1. Describe and Explain the Safety features of the building

- a) **Fire Alarm** – Type of alarm and purpose – what does the alarm cover, is it a single internal alarm or does a monitor company watch it and call 911, is there an alarm panel, does it have battery backup, are there pull stations how do they operate, what does the alarm sound like, When is it required to be tested, are the fire doors hooked to alarm.
- b) **Fire Sprinklers** – Type of sprinkler system and purpose – Is the building have full coverage, is there sprinklers in the garbage shoot, is the alarm hooked to the sprinkler system, what they look like, when is it required to be tested.
- c) **Fire Extinguishers** – Type and purpose – size, location,
- d) **Smoke Detectors** – Type and purpose – location, testing, battery replacement records.
- e) **Emergency lights** – Type and purpose – locations, required run time, test requirements
- f) **Exits and Exit stairwell** – Type and purpose – describe door latch hardware, doors and halls must be clear of debris and snow, never wedge open exit doors, must close on their own.
- g) **Fire Doors and Fire Walls** – Identify – Explain purpose
- h) **Emergency Generator** – Type of Generator and purpose – What does the generator run (lights in the stairs, halls, elevators, rooms, doors, when is it required to be tested.
- i) **Fire pumps and private hydrants** – location and purpose
- j) **Kitchen cooking suppression system** – Type of system and purpose – Cleaning schedule, Class K fire extinguisher location and use, Hood suppression system operation, pull station location, test requirements

2. Tasks for staff and occupants in the case of a fire – evacuation requirements

- a) Evacuation procedure and requirements (ie: muster location and or head count)
- b) Call 911 or confirm that the monitoring company called 911.
- c) Helping persons in the building that require more assistance to evacuate
- d) Assigned persons who checks the alarm panel for location of alarm and meets fire crews
- e) Assigned persons to confirm location of fire
- f) Trained persons to extinguish the fire
- g) Assigned persons maintain fire safety schedule

3. Documents – maps, dates, sign off sheets

- a) Floor plan maps of each floor (exit locations, pull stations, extinguisher locations, muster point)
- b) Fire drill dates past and present and attendance sheet
- c) Inspection dates for safety features past and present
- d) Monthly checks signed off
- e) Sign off sheet for required fire safety plan review

----Lethbridge Fire Prevention will not approve Fire Safety Plans however we will provide guidance and recommendations



Emergency Planning

What buildings & areas are required to prepare a fire safety plan?

- Every building containing an assembly over 30, care treatment, detention, school, daycare, licensed beverage, personal services
- Every building required by (NBC (AE)) to have a fire alarm system
- Buildings containing storage of Class I, II, III and IV commodities, and Group A, B and C plastics
- Areas where Flammable & Combustible liquids are stored or handled
- Areas where hazardous processes or operations occur
- Construction and demolition sites

Who is Trained? -Supervisory staff shall be trained in the procedures described in the plan

Access? -Supervisory Staff, Occupants of building, Fire Department

What to plan for?

- Sound the fire alarm
- Notify the fire department
- Instruct occupants on what to do when alarm sounds
- Evacuate occupants include provisions for those needing assistance
- Confirming, controlling and extinguishing the fire
- Appoint supervisory staff to carry out duties
- Train supervisory staff and occupants their responsibilities
- Document, include diagrams, of building emergency systems
- Hold fire drills (see requirements below)
- Control fire hazards in area or building
- Inspect and maintain building facilities

How often safety plan reviewed?

- No greater than 12 months

Where is safety plan displayed or stored?

- <or = to one copy per floor
- Hotel & motel – posted showing location of exits and paths of travel to exits
- If not transmission of fire alarm to fire dept. post sign above pull stations requesting fire dept. notification & phone #

Fire drill frequency follow NFC (AE) 2.8.3.1. procedure and shall be held;

- Supervisory staff - not > 12 months
- Child-care centers and Group B major occupancies - not > one month
- Schools attended by children - 3 in fall and 3 in spring
- High buildings - not > 2 months
- Laboratory - not > 3 months

Special occupancies

- Care, treatment, & detention – have sufficient number of staff
- Assembly – Group A1 occupancies containing > 60 require one trained supervisory staff
- High Buildings – Trained staff in voice communication, elevator use, smoke control, fire emergency system(s), & procedures to facilitate access within the building
- If fire alarm is shut down >2 hours – notify Fire Dept., provide a fire watch and provide plan of notification occupants.
- Daycares - >10 children staff conduct inspections not > 1 month



Section 2.8. Emergency Planning

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 a *care, home-type care, treatment* or *detention occupancy*,
 - b) every *building* containing a school, college or university, or a daycare facility,
 - c) every *building* containing a licensed beverage establishment or a licensed restaurant,
 - d) every *building* containing an *assembly occupancy* other than one of those described in Clauses (b) and (c) with an *occupant load* of more than 30,
 - e) every *building* containing an area where *treatment* is provided in *business and personal services occupancies*,
 - f) every *building* required by the NBC(AE) to have a fire alarm system,
 - g) demolition and construction sites regulated under Section 5.6.,
 - h) storage areas in *buildings* or parts of *buildings* described in Article 3.2.1.1.,
 - i) outdoor areas where products described in Article 3.3.1.1. are stored,
 - j) every *building*, part of a *building*, and open area described in Article 4.1.1.1., and
 - k) every *building*, part of a *building*, and open area where processes and operations described in Article 5.1.1.1. take place.

2.8.1.2. 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) A sufficient number of *supervisory staff* shall be on duty in *care, home-type care, treatment* and *detention occupancies* to carry out the emergency procedures outlined in Clause 2.8.2.1.(3)(a). (See Note A-2.8.1.2.(2).)
- 3) In Group A, Division 1 *assembly occupancies* intended for an *occupant load* of more than 60, at least one *supervisory staff* member shall be on duty in the *building* to carry out the emergency procedures outlined in Clause 2.8.2.1.(3)(a) whenever the *building* is open to the public.

2.8.1.3. Keys and Special Devices

(See Subsection 2.2.10. of Division C.)

- 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

(See Sentence 2.2.1.2.(14) and Note A-2.2.7.2.(3) of Division C.)

2.8.2.1. Measures in a Fire Safety Plan

- 1) For *buildings*, parts of *buildings* and 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.
- 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*.
- 3) The fire safety plan shall include, in addition to the information required in Articles 2.8.2.2. to 2.8.2.11., as applicable, information on
 - a) the emergency procedures to be carried out in case of fire, including
 - i) sounding the fire alarm (see Note A-2.8.2.1.(3)(a)(i)),

- ii) notifying the fire department,
- iii) instructing occupants on the procedures to be followed when the fire alarm sounds,
- iv) evacuating occupants, including special provisions for persons requiring assistance (see Note A-2.8.2.1.(3)(a)(iv)), and
- v) 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 on their responsibilities as regards fire safety,
- d) the type, location and operation of the *building* fire emergency systems, including diagrams,
- e) the holding of fire drills,
- f) the measures for controlling fire hazards in and around the *building*, and
- g) the inspection and maintenance of *building* facilities provided for the safety of occupants.

(See Note A-2.8.2.1.(3).)

2.8.2.2. High Buildings

- 1) For *buildings* within the scope of Subsection 3.2.6. of Division B of the NBC(AE), the fire safety plan shall include
 - a) information on the training of *supervisory staff* in the use of the voice communication system,
 - b) the procedures for the use of elevators,
 - c) information on 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,
 - d) instructions to the *supervisory staff* and fire department for the operation of the systems referred to in Clause (c),
 - e) the procedures established to facilitate fire department access to the *building* and fire location within the *building*, and
 - f) the test procedures described in Subsections 7.3.2. to 7.3.15., as appropriate to the fire safety measure being used, in addition to those required by Sections 7.1. and 7.2., unless otherwise specified in the fire safety plan.

2.8.2.3. Indoor and Outdoor Storage of Dangerous Goods

- 1) Where *dangerous goods* are stored or handled, the fire safety plan shall include the names, addresses and telephone numbers of persons to be contacted in case of fire during non-operating hours.
- 2) Where the *dangerous goods* referred to in Sentence (1) consist of *dangerous goods* classified as radioactive materials, the fire safety plan shall also include
 - a) methods to control a fire emergency and to safely and efficiently recover radioactive materials and equipment containing radioactive materials,
 - b) the names, addresses and telephone numbers of primary and alternative sources of expert advice and assistance on radiation safety, and
 - c) the location of primary and alternative sources of radiation survey instruments.

2.8.2.4. Indoor Storage of Combustible Products and Dangerous Goods

- 1) The fire safety plan for *buildings* or parts of *buildings* used for the storage of products listed in Sentence 3.2.1.1.(1) shall include the information described in Sentences (2) and (3).
- 2) The fire safety plan shall identify
 - a) the product classifications for each part of the *building* where products of different classifications are stored,
 - b) the method of storage, including aisle widths for *rack* storage,
 - c) the maximum permitted height of storage for the *building* or part of the *building*, if different,

2.8.2.5.

- d) the maximum permitted size of *individual storage areas*, and
- e) in *sprinklered buildings*, the sprinkler system design criteria, inside and outside hose allowances, and results of the benchmark sprinkler system main drain and waterflow tests.

3) Where the products stored include Group A plastics, rubber products, Level 2 or 3 aerosols, or *dangerous goods*, the fire safety plan shall identify their location and the maximum quantity of each product being stored.

2.8.2.5. Outdoor Storage

- 1) The fire safety plan for outdoor areas used for the storage of products listed in Sentence 3.3.1.1.(1) shall identify
 - a) the location and classification of the products being stored,
 - b) the method of storage, including the clear spaces required and the maximum permitted size of *individual storage areas*,
 - c) the location of fire alarm systems and firefighting equipment, and
 - d) the measures for controlling fire hazards in and around the outdoor storage area.

2.8.2.6. Rooms for Storage Tanks

1) The fire safety plan for rooms for *storage tanks* referred to in Sentence 4.3.13.4.(1) shall identify the liquids being stored as *flammable liquids* or *combustible liquids* and the capacity of each *storage tank*.

2.8.2.7. Spill Control

- 1) The fire safety plan for *buildings*, parts of *buildings*, and open areas described in Article 4.1.1.1. shall include a spill management plan that describes the measures to be taken to direct the overflow of spilled liquids and water used for firefighting away from
 - a) *buildings*,
 - b) adjoining properties,
 - c) *means of egress*,
 - d) air intakes and openings that could allow vapour to enter the *building*,
 - e) fire alarm control panels,
 - f) fire department access routes,
 - g) valves controlling fire protection systems and the water supply for firefighting,
 - h) fire department pumper connections or wall hydrants,
 - i) isolation valves controlling processes, and
 - j) valves controlling the flow of *flammable liquids* or *combustible liquids*.

2.8.2.8. Hazardous Processes and Operations

- 1) The fire safety plan for areas where processes and operations described in Article 5.1.1.1. take place shall include
 - a) the location and identification of storage and use areas for specific products, in conformance with Article 2.8.2.4.,
 - b) the names, addresses and telephone numbers of persons to be contacted in case of fire during non-operating hours, and
 - c) where *dangerous goods* classified as radioactive materials are used or handled, the information specified in Article 2.8.2.3.

2.8.2.9. Hot Works

1) The fire safety plan for areas where hot works are conducted shall include the safety measures described in Section 5.2.

2.8.2.10. Laboratories

- 1) The fire safety plan for laboratories shall conform to Article 2.8.2.8.

2.8.2.11. Construction and Demolition Sites

1) Except as required in Sentence (2), prior to the commencement of construction, alteration or demolition operations, a fire safety plan shall be prepared for the site that includes

- a) the designation and organization of site personnel to carry out fire safety duties, including a fire watch service if applicable,
- b) the emergency procedures to be followed in the event of a fire, including
 - i) initiating a fire warning,
 - ii) notifying the fire department,
 - iii) instructing site personnel on the procedures to be followed once the warning has been initiated, and
 - iv) confining, controlling and extinguishing the fire,
- c) measures for controlling fire hazards in and around the *building* (see Note A-2.8.2.11.(1)(c)), and
- d) a maintenance procedure for firefighting measures required in Section 5.6.

2) Where construction, alteration or demolition operations are carried out in an existing *building* that is required to have a fire safety plan conforming to this Section, the fire safety plan shall take into account the changes occurring to the *building*.

2.8.2.12. Retention of Fire Safety Plans

1) The fire safety plan shall be kept in the *building* for reference by the fire department, *supervisory staff*, the *authority having jurisdiction*, and other personnel.

2) The fire safety plan for a *building* within the scope of Subsection 3.2.6. of Division B of the NBC(AE) 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.

2.8.2.13. 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*.

2.8.2.14. Posting of Fire Emergency Procedures

1) At least one copy of the fire emergency procedures for a *building* or part of a *building* shall be prominently posted in each *floor area*.

2) At least one copy of the fire emergency procedures for an outdoor storage site shall be prominently posted at the outdoor storage site.

3) 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*.

4) 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 signalling box requesting that the fire department be notified, and including the telephone number of that department.

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 NBC(AE), and
- f) the requirements of the fire department.

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

2.8.3.2.

Division B

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 daycare centres 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 NBC(AE), 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.