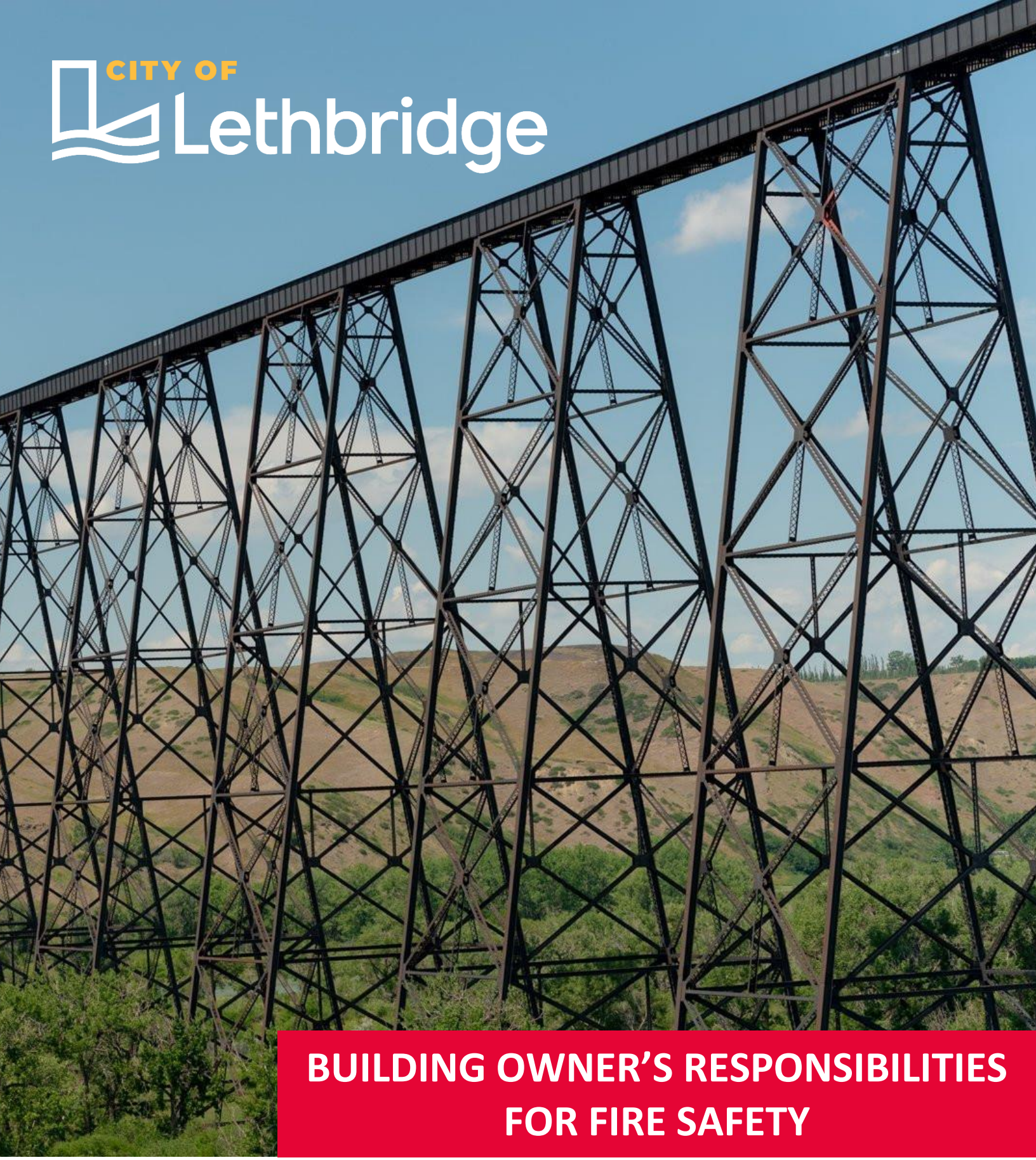
CITY OF Lethbridge



BUILDING OWNER'S RESPONSIBILITIES FOR FIRE SAFETY

Last Updated March 24, 2025

Lethbridge Fire and Emergency Services | 207 4 Ave S | Lethbridge AB, T1J 0M8 | lethbridge.ca

Fire Code Requirements for the Maintenance of Buildings and Life Safety Systems

Lethbridge Fire Prevention Bureau has prepared this reference document listing common fire safety maintenance requirements as found in the National Fire Code – 2023 Alberta Edition. With some exceptions, these requirements apply to all buildings in the City of Lethbridge. For a complete list of requirements see the National Fire Code – 2023 Alberta Edition – also referred to as NFC(AE).

Contents

Who is an Owner?

The *Safety Codes Act* under which NFC(AE) is applied, defines an "owner" to include a lessee, a person in charge, a person who has care and control and a person who holds out that the person has the powers and authority of ownership or who for the time being exercises powers and authority of ownership.

Who is Qualified?

Persons who install, inspect, test, and maintain life safety systems must be qualified for the specific system. This typically means that the person will either be a journeyperson electrician, certified fire alarm technician, journeyperson sprinkler system installer or other qualified person as per provincial or Lethbridge Fire and Emergency Services requirements. Accordingly, **owners are responsible for ensuring that the persons they hire are qualified.**

For additional information on who is qualified to install and maintain life safety equipment in Lethbridge, please visit Lethbridge.ca/fire and navigate to the Life Safety Systems Work Registry section or call Fire Prevention through 311.

Consequences for Failing to Comply

As per the *Safety Codes Act*, Section 68(1), owners failing to comply with maintenance requirements as identified in the NFC(AE) may be subject to fines of not more than $100,000 and/or imprisonment for a term not exceeding 6 months for the first offence. Second and subsequent offences may be subject to a fine of not more than $500,000 and/or imprisonment for a term not exceeding 12 months.

Fire Safety Maintenance Requirements

Responsibilities

If any fire safety equipment is discovered to be inoperative or defective through maintenance, CORRECTIVE ACTION must be taken IMMEDIATELY by the owner or owner's authorized agent.

Failure to take CORRECTIVE ACTION in a timely manner may be deemed to be a violation of the *Safety Codes Act* and may result in actions being taken against the owner(s) in care and control.

Responsible Parties

Unless otherwise specified, the owner or the owner's authorized agent shall be responsible for carrying out the provisions of this Code.

NFC(AE) Div. C 2.2.1.1.(1)

Shutdown of Fire Alarm Systems

If a fire alarm and detection system, or part thereof, is inoperative for more than 2 hours for any reason, **the owner shall notify the fire department via 311**, and when directed, provide acceptable surveillance within the building continuously until the fire alarm and detection system is restored to operating condition.

NFC(AE) Div. C 2.2.7.2.(2)

Repairs or Alterations to Life Safety Systems

Before repairs or alterations are made to fire protection installations, including but not limited to fire extinguishing systems and fire alarm and detection systems, a procedure of notification acceptable to the fire department shall be established, and the procedure may include the notification of the fire department and the building occupants.

NFC(AE) Div. C 2.2.7.2.(1)

Notification of Uncorrected Defects

If a person who carries out the maintenance of fire protection installations discovers that a device or system is inoperative or defective and the owner or their authorized agent is unwilling or unable to correct the defect, the person carrying out the maintenance shall (within 15 days) notify the fire department and the owner/authorized agent.

NFC(AE) Div. C 2.2.7.2.(4)

Definitions

LFES means Lethbridge Fire and Emergency Services

AUTHORITY HAVING JURISDICTION (AHJ) means a safety codes officer in the fire discipline exercising authority pursuant to designation of power and terms of employment in accordance with the Safety Codes Act.

CHECK means a visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

INSPECT means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

ITM means "Inspection, Testing & Maintenance"

MAINTENANCE means work performed to keep equipment operable.

NBC(AE) means the National Building Code – 2023 Alberta Edition, previously known as the "Alberta Building Code" (ABC)

NFC(AE) means the National Fire Code – 2023 Alberta Edition, previously known as the "Alberta Fire Code" (AFC)

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

SUPERVISORY STAFF means those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.

TEST means operation of device or system to ensure that it will perform in accordance with its intended function.

WATER-BASED FIRE PROTECTION SYSTEMS include sprinkler systems, standpipes, private hydrants, hose systems, water spray fixed systems, foam-water sprinkler systems, foam-water spray systems, and fire pumps.

Fire Safety Maintenance Requirements

On-Site Retention of Records

Owners or their authorized agents who are unable to produce records in a timely manner will be subject to actions under the Alberta Safety Codes Act.

To comply with these requirements, LFES recommends maintaining a printed copy of these records organized in an easy-to-find physical binder labeled "Life Safety Records." These records are essential for successful inspections and ongoing maintenance of building life safety systems.

This binder must be located in **one** of the following locations:

1. Fire Safety Plan box found near the main entrance
2. Central Alarm and Control Facilities (CACF) Room, if your building is equipped with one.
3. On-site central records keeping room, for institutions that manage multiple buildings located in one physical area (e.g.: hospital complexes, large educational institutions, large industrial sites). In these instances, one binder per building is required.

Requirements

1. The original or a copy of records required by the NFC(AE) shall be retained **at the premises** for examination.

   NFC(AE) Div. C 2.2.1.2.(1)

2. Records of **fire evacuations** and **fire safety drills** shall be retained at the premises for examination.

   NFC(AE) Div. C 2.2.1.2.(5)

3. The **initial verification** or **test reports** for each system shall be retained throughout the life of the systems.

   NFC(AE) Div. C 2.2.1.2.(2)

4. Records of tests, inspections, maintenance or operational procedures undertaken after the initial tests referred to in #3 shall be retained so that at least the **current** and **previous record** is available.

   NFC(AE) Div. C 2.2.1.2.(3)

5. **No record shall be destroyed** within five years of having been prepared.

   NFC(AE) Div. C 2.2.1.2.(4)

Records to be Retained

The following is a list of records that are frequently examined by Fire Safety Codes Officers. Exact records required for your building are determined by the life safety systems, processes and activities in your building. For clarification on what is required in your building, contact LFES Fire Prevention Bureau via 311.

See "Appendix A – Records Checklist" for an insert that may be used to ensure all required records are present in the "Life Safety Records" binder.

Record Type	Frequency
Commercial Cooking **Exhaust** and **Fire-Protection Systems**, Other Special Fire Suppression Systems	Initial, 6 Month
Doors with Electromagnetic Locks – Test as per LFES requirements	Annual
Emergency Generator Systems **This specific record type may be kept in the generator room or with all other records in the "Life Safety Records" binder.**	Initial, Monthly, 6 Month, Annual, 5 Year
Emergency Lighting	Annual
Fire Alarm & Voice Communication Systems	Initial, Annual
Fire Drills	As required
Fire Safety Plan – see Emergency Planning	Reviewed Annually by owner or owner's agent
Integrated Systems Testing Report	As required
Make-up Air Systems and CO/N20 detectors in enclosed parkades	Annual
ULC Monitoring Certificate (Protective Signaling System only)	Current certificate where applicable
Water-Based Fire Protection Systems including but not limited to: • Fire Pumps • Private Hydrants • Sprinklers • Standpipes	Initial, Annual, 3-year and 5-year records where applicable

Proof of Deficiency Resolution

Where deficiencies are noted on reports, subsequently issued letters and/or updated reports from **qualified person(s)** that speak to these deficiencies must be retained with the originally issued report as proof of resolution.

Fire Safety Maintenance Requirements

General Requirements

In addition to the requirements outlined elsewhere in this document (e.g., emergency generators, fire alarms, water-based fire protection systems), the following general requirements apply to most buildings.

Code references noted below with an asterisk (*) require written records as per NFC(AE) Division C, Article 2.2.1.2.

Daily	NFC(AE)
Fire Doors – **CHECK** doors in fire separations to ensure they remain closed, unless equipped with hold-open devices conforming to NBC(AE)	2.2.2.4.(2)
Weekly	**NFC(AE)**
Hoods, Ducts and Filters in Ventilation Systems – **INSPECT** for accumulation of combustible deposits and clean as required	2.6.1.3
Monthly	**NFC(AE)**
Exit Doors – **TEST** all doors forming a part of a means of egress to ensure they are operable	2.7.2.1.(1)
Fire Doors – **OPERATE** all doors in fire separations to ensure they are maintained as per Sentence 2.2.2.4.(1)	2.2.2.4.(3)
Fire Safety Measures in Daycares – **INSPECT** in conformance with fire safety plan for fire prevention	2.10.4.1
Every 6 Months	**NFC(AE)**
Special Fire Suppression Systems – **TEST**, **INSPECT** and **MAINTAIN** systems as per the appropriate NFPA code as per NFC(AE) Div. B, Article 2.1.3.5	6.6.1.1 *
Annually	**NFC(AE)**
Chimney Spark Arrestors – **INSPECT**, **CLEAN** and repair burnt-out arrestors	2.6.2.3
Chimneys, Flues and Flue Pipes – **INSPECT**	2.6.1.4.(1)
Doors (Revolving) – **TEST** safety features	2.7.2.1.(2) *
Doors (Sliding) – **TEST** sliding doors that are required to swing on their vertical axis in the direction of egress when pressure is applied	2.7.2.1.(3) *
Doors with Electromagnetic Locks – **TEST** to ensure they work properly	2.7.2.1.(4) *
Fire Dampers, Smoke Dampers and Fire Stop Flaps – **INSPECT** and **TEST** as per NFPA 80	2.2.2.4.(5)
Fire Safety Plan – **REVIEW** for changes in use and other characteristics of the building	2.8.2.1.(2)
Mechanical Air-Conditioning and Ventilating Systems, Exhaust and Make-up Air Systems – **TEST** system initiating devices (CO/N2O detectors) in enclosed parkades; **OPERATE** disconnect switches	2.6.1.6.(2) *

Ongoing Requirements	NFC(AE)
Access Panels and Windows – **MAINTAIN** free of obstruction where provided to facilitate access for firefighting operations	2.5.1.2
Chimneys, Flues and Flue Pipes – **MAINTAIN** by cleaning to keep them free of dangerous accumulations of combustible deposits; replace or repair as per Sentence 2.6.1.4.(3); **MAINTAIN** clearances between chimneys, flue pipes, or appliances and combustible construction as per NBC(AE)	2.6.1.4.(2) 2.6.1.5.(1)
Closures in a fire separation (doors, shutters, dampers, etc.) – **INSPECT** and **MAINTAIN** so that defects are corrected and closures are operable at all times; repair where damaged to **MAINTAIN** the integrity of their fire-protection rating	2.2.2.4 2.2.2.2
Combustible Materials – **CHECK** to ensure materials are not accumulating in any part of an elevator shaft, ventilation shaft, means of egress, service room or service space, or being stored in crawl spaces, ceiling spaces or roofs	2.4.1.1
Door Release Hardware, Latches and Locks – **MAINTAIN** in good working condition at all times	2.1.2.4
Electrical Installations – Use and **MAINTAIN** so as to not constitute an undue fire hazard	2.4.7.1
Exterior Passageways and Exit Stairs – **MAINTAIN** free of snow and ice accumulations; **MAINTAIN** equipment used to melt snow or ice	2.7.1.7
Fire Department Access – **ENSURE** streets, yards and roadways that are provided for fire department access are kept clear	2.5.1.5
Fire Department Connections – **MAINTAIN** free of obstructions at all times	2.5.1.4
Fire Separations – Repair where damaged to **MAINTAIN** the integrity of the fire separation	2.2.2.1
Flame-Retardant Treatments – **MAINTAIN** by renewing as often as is required to ensure that the material will pass the match flame test in NFPA 705	2.3.2.2 2.9.2.1
Heating, Ventilating and Air-Conditioning Systems, including appliances, chimneys and flue pipes – Operate and **MAINTAIN** so as not to create a hazardous condition	2.6.1.6.(1)
Laundry Equipment – **CHECK** and empty lint traps to prevent lint from accumulating	2.4.1.4
Means of Egress – **MAINTAIN** in good repair and free of obstructions	2.7.1.6

Fire Safety Maintenance Requirements

Commercial Cooking Operations

NFC(AE) Division B, Article 2.6.1.9 requires that commercial cooking equipment and fire protection systems be designed and installed in conformance with the applicable building code, and that the use, inspection and maintenance of commercial cooking equipment exhaust and fire protection systems be in conformance with NFPA 96-2017, "Ventilation Control and Fire Protection of Commercial Cooking Operations."

Written records shall be maintained as per NFPA 96 and retained on-site for examination by the AHJ. A report must be completed by a qualified person for each maintenance frequency described below and kept on-site for five years.

Inspection, Testing and Maintenance Requirements

"Exhaust Systems" in the table below include Hoods, Grease Removal Devices, Fans and Ducts for Commercial Cooking Equipment.

Frequency of Maintenance	Requirements
Monthly	**INSPECT** and **CLEAN** as required as per NFPA 96
Every 3 Months	**INSPECT** and **CLEAN** as required as per NFPA 96
Every 6 Months	**INSPECT** and **CLEAN** as required as per NFPA 96
Every 6 Months	**INSPECT** and **MAINTAIN** as per NFPA 96 and other applicable standards (e.g., NFPA 17A "Wet Chemical Extinguishing Systems")
Annually	**INSPECT** and **CLEAN** as required as per NFPA 96

Inspection vs. Cleaning of Exhaust Systems

All exhaust systems **must** be inspected at the applicable maintenance frequency as outlined above as per NFPA 96-2017. A determination of whether cleaning is required will be made on the basis of NFPA 96, including use of the depth gauge comb as described in the standard. This determination can only be made by the qualified person who inspects the system.

Additional Requirements

1. Hoods, grease removal devices, fans, ducts, and other appurtenances shall be cleaned at frequent intervals to prevent surfaces from becoming heavily contaminated with grease or other residues.
2. Flammable cleaning materials or solvents shall not be used for the cleaning of exhaust systems.
3. Instructions for manually operating the fire protection systems shall be posted conspicuously in the kitchen as part of the fire safety plan.
4. Commercial cooking equipment that is certified shall be installed and maintained in conformance with its certification.
5. Uncertified commercial cooking equipment (where permitted) shall be installed and maintained so as not to create a fire hazard.

Deficient Systems

Deficiencies in exhaust systems (e.g., leaking welds) or in the fire protection system are required to be repaired in a timely manner to ensure the integrity and functionality of the system. At a minimum, "timely manner" means "before the next regularly scheduled maintenance period" but inoperative systems must be repaired immediately for system use to continue.

Fire Safety Maintenance Requirements

Emergency Lighting, Exit Lighting & Exit Signs

NFC(AE) Division B, Articles 6.5.1.6, 6.5.1.7 and 6.5.1.8 require the inspection, testing and maintenance of Unit Equipment, Emergency Lights and Exit Signs.

Written records for all annual inspection, testing and maintenance shall be retained on-site for examination by the AHJ. See On-Site Retention of Records for more information.

Inspection, Testing and Maintenance Requirements

Frequency	Requirements
Ongoing NFC(AE) 2.7.3.1.(2)	Exit Lighting and Exit Signs – **CHECK** to ensure they are illuminated during times when the building is occupied
Monthly NFC(AE) 2.7.3.1.(3)	Emergency Lighting (self-contained units) – **INSPECT**, **TEST** and **MAINTAIN** batteries, unit sand lamps as per Article 6.5.1.6 Exit Signs with Battery Back-up – **INSPECT** to ensure visibility upon failure of the primary power supply as per 6.5.1.8.(2)(a)
Annually *	Emergency Lighting (self-contained units) – **INSPECT**, **TEST** and **MAINTAIN** batteries, units and lamps as per Article 6.5.1.6 Emergency Lights (other than self-contained units) – **INSPECT** to ensure they are functional as per Article 6.5.1.7 Exit Signs – **INSPECT** and **TEST** to ensure visibility upon failure of the primary power supply and, where equipped with battery back-up, for the design criterion as per Article 6.5.1.8

Deficient Systems

All deficiencies are to be repaired to maintain the functionality and design criterion of the equipment.

Who is Qualified?

Building operators/maintenance personnel, fire alarm technicians and electricians.

Fire Safety Maintenance Requirements

Electromagnetic Locks

NFC(AE) Div. B 2.7.2.1 requires that, when doors are equipped with electromagnetic locks, these locks be tested at intervals not greater than 12 months.

Electromagnetic locks that malfunction or are not installed to-code pose a significant threat to building occupants and emergency responders. To ensure that these locks are maintained, an itemized, dated and signed report issued by a qualified person (journeyperson electrician or fire alarm technician) must be completed annually, retained for five years and made available to the AHJ upon request. *

The report must speak to the operation of each magnetic lock on the premises. Each lock must be tested to ensure compliance with building code at time of installation.

Test for All Occupancies except B2/B3

Test #	Test Details and Reference	Applies Since
1	Location of door NFC(AE) Div. B 2.7.2.1	AFC 1997
2	Releases upon actuation of the *alarm signal* from the building's fire alarm system ** NBC(AE) Div. B 3.4.6.16.(5)(b)	ABC 1990
3	Releases upon loss of power controlling the electromagnetic locking mechanism and associated auxiliary controls NBC(AE) Div. B 3.4.6.16.(5)(c)	ABC 1990
4	Releases immediately upon actuation of a manually operated switch "readily accessible only to authorized personnel" NBC(AE) Div. B 3.4.6.16.(5)(d)	ABC 1990
5	A force of not more than 90 N applied to the door opening hardware initiates an irreversible process that releases the locking device within 15 seconds and does not re-lock (crossover doors excepted – see Test #11) NBC(AE) Div. B 3.4.6.16.(5)(e)	ABC 1990 Crossover doors since NBC(AE) 2019
6	Upon release, requires the locking device to be manually reset by the actuation of the operated switch "readily accessible only to authorized personnel" NBC(AE) Div. B 3.4.16.(5)(f)	ABC 1990
7	Has a legible sign permanently mounted on the door to indicate that the locking device will release within 15 seconds of applying pressure to the door opening hardware NBC(AE) Div. B 3.4.6.16.(5)(g)	ABC 1990
8	The total time delay for all electromagnetic locks in any path of egress to release is not more than 15 seconds NBC(AE) Div. B 3.4.6.16.(5)(i) Buildings built under ABC 1990 until ABC 2014 permitted 30 second total time delay ABC 2014 Div. B 3.3.1.13.(10).	NBC(AE) 2019 15 seconds ABC 1990 – 2014 30 seconds
9	Where a bypass switch is installed to allow testing of the fire alarm system, actuation of the switch complies with NBC(AE) NBC(AE) Div. B 3.4.6.16.(5)(j)	NBC(AE) 2019
10	Emergency lighting is provided at each door NBC(AE) Div. B 3.4.6.16.(5)(k)	NBC(AE) 2019
11	If the electromagnetic lock is installed on a door providing emergency crossover access to floor areas from exit stairs in accordance with NBC(AE) Div. B 3.4.6.18, complies with NBC(AE) NBC(AE) Div. B 3.4.6.16.(5)(l)	NBC(AE) 2019

** Annual fire alarm inspection and testing only refers to the operation of ancillary device circuits for door release. As such, these reports are not considered appropriate tests of electromagnetic locks.*

*** Note that where a 2-stage fire alarm is installed, alarm signals differ from alert signals, however release upon actuation of an alert signal from the building's fire alarm system is also permitted.*

Fire Safety Maintenance Requirements

Test for Electromagnetic Locks within Group B, Division 2 and Division 3 Occupancies

This test is only available for buildings built under Alberta Building Code (ABC) 2014 with Fire Code Variance STANDATA 14-FCV-012 or those built under 2019 NBC(AE) or later. All other buildings must comply with electromagnetic locks as per the applicable building codes.

Test #	Test Details and Reference	Applies Since
1	Location of door NFC(AE) Div. B 2.7.2.1	AFC 1997
2	Releases upon actuation of the *alarm signal* from the building's fire alarm system NBC(AE) Div. B 3.4.6.16.(6)(b)(i)	ABC 2014
3	Releases upon loss of power supply and power to maglock auxiliary control NBC(AE) Div. B 3.4.6.16.(6)(b)(ii)	ABC 2014
4	Releases upon actuation of a manually operated switch that is readily accessible at a constantly attended location within the locked space NBC(AE) Div. B 3.4.6.16.(6)(b)(iii)	ABC 2014
5	Releases upon actuation of the manual station installed within 0.5 m of each door and equipped with an auxiliary contact, which directly releases the electromagnetic lock NBC(AE) Div. B 3.4.6.16.(6)(b)(iv)	ABC 2014
6	Upon release, the electromagnetic lock requires manual resetting by actuation of the switch referred to in Subclause (b)(iii) NBC(AE) Div. B 3.4.16.(6)(c)	ABC 2014
7	A legible sign with the words "EMERGENCY EXIT UNLOCKED BY FIRE ALARM" written in letters at least 25 mm high with a stroke of at least 5mm wide is permanently mounted on the door (in the direction of travel) NBC(AE) Div. B 3.4.6.16.(6)(d)	ABC 2014
8	The operation of any by-pass switch, where provided for the testing of the fire alarm system, sets off an audible and visual signal at the fire alarm annunciator panel and at the monitoring station referred to by Sentence 3.2.4.7.(4) NBC(AE) Div. B 3.4.6.16.(6)(f)	ABC 2014
9	Emergency lighting is provided at the doors NBC(AE) Div. B 3.4.6.16.(6)(g)	ABC 2014

Fire Safety Maintenance Requirements

Emergency Generator Systems

NFC(AE) Division B, Section 6.5 requires that emergency generators and related systems be maintained as per CSA C282-15, "Emergency Electrical Power Supply for Buildings."

Written records for all inspection, testing and maintenance shall be retained on-site for examination by the AHJ. These records may be kept in the same location as other on-site records or in the generator room. See On-Site Retention of Records for more information.

Inspection, Testing and Maintenance Requirements

Frequency	Requirements
Initial Acceptance Tests	Retain acceptance documentation on-site for the life of the system
Weekly – for Health Care Facilities only	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282
Weekly – for All Other Facilities	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282
Monthly	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282
Every 6 Months	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282
Annually	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282
Every 5 Years	**INSPECT**, **TEST** and **MAINTAIN** as per CAN/CSA C282

Deficient Systems

Generators that are found to be deficient, through inspection and testing, are required to be repaired (maintained) in a timely manner to serve the original power requirements and design of the emergency system. **Generators shall not be de-rated by anyone other than a professional engineer**, who through training and experience, may competently speak to the power requirements of the systems that depend on the emergency generator system.

Where an annual load test cannot be completed due to a deficiency in the generator, the load test must be repeated to successful conclusion following repairs to the generator.

Who is Qualified?

Weekly and Monthly inspection, testing and maintenance may be completed by Building Operators/Maintenance Personnel who have received and can prove (certificates, transcripts, letter of competency, etc.) training by the generator manufacturer.

Inspection, testing and maintenance for all other frequencies (semi-annual, annual, 5-year) may only be performed by persons who have received and can prove (through certificates, transcripts) training by the generator manufacturer, where required by the manufacturer, or successful achievement in a related post-secondary field (e.g., stationary engineer).

Fire Safety Maintenance Requirements

Fire Alarm & Voice Communication Systems

NFC(AE) Division B, Section 6.3 outlines requirements for fire alarm and voice communication systems (e.g., fire phones), and requires that fire alarm systems be inspected and tested in conformance with CAN/ULC-S536:2019.

Written records for all monthly and annual inspection, testing and maintenance shall be documented as per CAN/ULC-S536:2019 and retained on-site for examination by the AHJ. See On-Site Retention of Records for more information.

Inspection, Testing and Maintenance Requirements

Frequency	Requirements
Daily – Fire Alarm CAN/ULC-S536 Subsection 5.1	**CHECK** for trouble on primary or remote trouble indicators **CHECK** status of primary power "on" or equivalent indicator
Monthly – Fire Alarm CAN/ULC-S536 Subsection 5.2	**INSPECT** and **TEST** on emergency power supply to confirm operability of fire alarm system as per CAN/ULC-S536. It is recommended that monthly tests be coordinated with emergency power generator tests, where applicable. Written records are required to be maintained as per CAN/ULC-S536. The monthly test is not required in the month that the annual inspection, testing & maintenance is conducted.
Monthly – Voice Communication	Where such systems are part of the building evacuation plan and not otherwise electronically supervised, **TEST** as per NFC(AE). Keep written records of tests and outcomes.
Annual – Fire Alarm CAN/ULC-S536 Section 6	**INSPECT** and **TEST** the system as per CAN/ULC-S536 by qualified persons acceptable to AHJ. Written records are required to be maintained as per CAN/ULC-S536. **For the purposes of this standard, an annual inspection shall be held within a period not exceeding 12 months from the date of the previous annual inspection.** Smoke Detectors >10 Years of Age – Where not otherwise automatically tested by the fire alarm system, **TEST** for sensitivity or replace as per NFC(AE) Div. B 6.7.1.1
Annual – Voice Communication	**TEST** the system as per NFC(AE) by qualified personnel acceptable to the AHJ. Keep written records of tests and outcomes.

Additional Requirements

1. Fire alarm and voice communication systems shall be maintained in operable condition at all times.
2. Fire alarm and detection system components shall be accessible for purposes of inspection or maintenance.
3. If a fire alarm or sprinkler system is required to transmit a signal to the fire department in conformance with NBC(AE), the connection shall be operational at all times.
4. Requirements for annual smoke detector sensitivity testing outlined in Subsection 6.7.4 of CAN/ULC-S536 shall not apply until a smoke detector has been in place for 10 years.

Who is Qualified?

Daily and Monthly inspection and testing may be performed by building operators who have received and can prove (certificate or letter of competency) training by the fire alarm system manufacturer or service provider for their specific fire alarm system.

Annual inspection, testing and maintenance may only be performed by qualified persons as per NFC(AE).

Fire Safety Maintenance Requirements

Hazardous Processes and Operations

Requirements for Hazardous Processes and Operations are covered under Part 5 of NFC(AE). Anyone engaging in activities regulated by this part of the fire code is expected to be familiar with the applicable regulations.

Written records may be required depending on the activity and regulation, and many situations require special consideration in a Fire Safety Plan. Refer to the appropriate regulation and On-Site Retention of Records for more information.

Common Hazardous Activities

Activity	NFC(AE)
Dipping and Coating Processes – **MAINTAIN** as per NFPA 34	5.4.6.2
Dust-Producing Operations – **MAINTAIN** (by cleaning) building and machinery of any combustible dust produced	5.3.1.2 5.3.2.2
Industrial Ovens – **INSPECT**, **MAINTAIN** and clean all industrial ovens and associated ductwork as per NFPA 86	5.4.1.2
Spray Booths and Dry-powder Finishing Operations – **MAINTAIN** as per NFPA 33 and (by cleaning) residue on walls, ceilings, floors, on filters and in plenum spaces, etc. from spraying operation, **MAINTAIN** filters by replacing as required	5.4.5.2
Torches, Regulators and Welding Equipment – **CHECK** daily for leakage and defects	5.2.2.2

Fire Safety Maintenance Requirements

Health Care Facilities

In addition to the requirements found elsewhere in this document, Health Care Facilities (Group B, Division 2 and Division 3 occupancies) have additional maintenance requirements.

Additional Requirements

Frequency	Requirements
Weekly	Additional requirements for Emergency Generators – see "Emergency Generator Systems"
Monthly	Conduct fire drills for *supervisory staff* (those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan).
Every 6 Months	Fire Marshals for Group B, Division 2 Occupancies – **INSPECT** the building and all related buildings for fire hazards and provide a written report to the person in charge as per Article 2.15.1.1 and **forward a copy of the report to the AHJ** (submit to Fire Prevention via 311). The report shall indicate the following: a) The condition of the exits, fire extinguishers, and fire alarm equipment, and b) Any other conditions relative to fire safety in the building or related buildings
Annually	Testing of any Electromagnetic Locks present for Group B, Division 2 and 3 Occupancies – see "Testing of Electromagnetic Locks."

High Buildings

High buildings have special maintenance requirements according to Part 7 of NFC(AE) and the applicable building code. To determine whether these requirements apply to your building, refer to your building permit and applicable building code (e.g., NBC(AE) Division B, Subsection 3.2.6).

A written record shall be kept of all tests and corrective measures for Fire Emergency Systems under Part 7 and retained for examination by the AHJ. See On-Site Retention of Records for details.

Additional Requirements

Frequency	Requirements
Every 2 Months	Conduct fire drills for *supervisory staff* (those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan).
Every 3 Months	Fire Emergency Systems – **TEST, OPERATE** and **MAINTAIN** as per NFC(AE) Part 7
Annually	Building Emergency Power Systems – **OPERATE** and **TEST** all elevators supplied with emergency power as per NFC(AE) Div. B Subsection 7.2.2 with no other source of power.
Every 2 Years	Smoke Control Measures – **INSPECT** and **TEST** pressurized building systems in different seasons as per NFC(AE) Div. B Section 7.3

Additional Requirements for Emergency Planning

The Fire Safety Plan for high buildings must speak to additional concerns specific to the high building in question. See Article 2.8.2.2 or Emergency Planning for details.

Fire Safety Maintenance Requirements

Integrated Systems Testing

NFC(AE) Division B, Section 6.8 requires that interconnections between fire protection and life safety systems be tested and maintained in conformance with CAN/ULC-S1001, "Integrated Systems Testing of Fire Protection and Life Safety Systems."

Scope and Purpose of Integrated Systems Testing (IST)

Building owners must ensure that fire protection and life safety systems and their components (i.e., fire alarm systems, sprinklers, standpipes, smoke control, ventilation, pressurization, door hold-open devices, elevator recalls, smoke and fire shutters and dampers, emergency power, emergency lighting, fire pumps, generators, etc.), including their interconnections with other building systems, are functioning according to the intent of their design. CAN/ULC-S1001-11 provides the methodology for verifying and documenting that interconnections between building systems satisfy the intent of their design and that the systems function as intended by code.

Application

IST applies to all buildings built under the National Building Code – 2019 Alberta Edition **where two or more integrated fire protection and life safety systems are present**. These systems may or may not be physically connected with one another but are designed to operate together to achieve an overall fire protection and life safety objective.

Requirements for Testing

Frequency	Requirements
Initial Test	IST first occurs as per building code near the end of the building construction phase (new installations of integrated fire protection and life safety systems) and is required to be completed prior to issuance of occupancy.
One Year after Initial Test	The next IST is to be conducted one year after the completion of the initial test.
Every 5 Years	Following the one-year test, subsequent integrated tests shall be conducted at intervals not exceeding five years.
After Modifications	Where a modified fire protection and life safety system underwent an initial or retro test, only those portions of the testing plan affected by the modifications to the system or building shall be implemented. As the system design professional(s) may not be involved in the modification, the integrated testing coordinator shall investigate the affected fire protection and life safety systems to establish the appropriate sequence of operation and integrations for each system.
Retro-Integrated	Only applies to buildings where initial integrated systems testing was required by building code but not performed.

Requirements for Documentation

Upon successful completion of integrated testing the Integrated Testing Coordinator (a registered engineering professional) shall prepare an "Integrated Testing Report" and provide this report to the building owner. The report and all associated documentation shall be maintained on-site (see CAN/ULC-S1001-11 5.3.7) for examination by the AHJ.

The Integrated Testing Report shall include, but not be limited to the following:

1. The *integrated testing plan* as per CAN/ULC-S1001-11 5.2.3,
2. Initial integrated testing forms as per CAN/ULC-S1001-11 Subsection 7.2,
3. Re-test integrated testing forms, and
4. Documentation provided as required by Subsection 2.2.1.2.(9)(c), Integrated Systems Testing.

Fire Safety Maintenance Requirements

Portable Fire Extinguishers

NFC(AE) Division B, Subsection 2.1.5 requires that portable extinguishers be installed in all buildings except *dwelling units*, and be selected and installed as per NFPA 10-2013, "Standard for Portable Fire Extinguishers." Section 6.2 further requires that extinguishers be inspected, tested and maintained in conformance with the same standard.

Installation and Selection of Extinguishers

Work with the vendor of your choice for extinguisher placement in accordance with NFPA 10-2013. Where questions arise, owners may refer to the LFES Fire Prevention Bureau via 311.

Inspection, Testing and Maintenance Requirements

Frequency	Requirements
Monthly (see below)	**INSPECT** extinguisher and sign monthly tag area as per NFPA 10 7.2.2
Annually	**INSPECT**, **TEST** and **MAINTAIN** as per NFPA 10 by qualified personnel acceptable to the AHJ
Every 3 Years	**REPLACE** premixed agent in liquid charge-type AFFF and FFFP extinguishers as per NFPA 10 7.7.2.3
Every 5 Years	Hydrostatically **TEST** at 5 years of age as required by NFPA 10 Table 8.3.1
Every 6 Years	**REPLACE** the extinguishing agent in stored-pressure fire extinguishers as per NFPA 10 7.3.6
Every 12 Years	Hydrostatically **TEST** at 12 years of age as required by NFPA 10 Table 8.3.1

Monthly Inspection

Prior to signing the monthly tag area, inspection shall include a check of at least the following indicators:

1. Location in designated place
2. No obstruction to access or visibility
3. Pressure gauge reading or indicator in the operable ("normal") range or position
4. Fullness determined by weighing or hefting
5. Condition of tires, wheels, carriage, hose and nozzle (for wheeled extinguishers)
6. Indicator for non-rechargeable extinguishers using push-to-test pressure indicators

Who is Qualified?

Monthly inspections may be completed by building occupants who have a responsibility for fire safety under the fire safety plan. All other inspection testing and maintenance must be performed by qualified persons employed by a certified company. Contact the Lethbridge Fire Prevention Bureau through 311 for further information on who is qualified in these situations.

Fire Safety Maintenance Requirements

Water-Based Fire Protection Systems

Water-based fire protection systems be inspected, tested and maintained as per NFPA 25-2017, "Inspection, Testing and Maintenance of Water-Based Fire Protection Systems."

Below is a list of typical requirements. Refer to NFPA 25-2017 for a complete set of requirements. This document does not mention Water Spray Fixed Systems, Foam-Water Sprinkler Systems or Water Mist Systems.

Weekly	NFPA 25
Common Components and Valves – **INSPECT** backflow prevention assemblies, sealed control valves, gauges	Chapter 13
Common Components and Valves – **TEST** fire pump casing and pressure-relief valves	Chapter 13
Fire Pump – **INSPECT** diesel and electric systems, pump, pump house/room, steam pump system	8.2.2
Fire Pump – **TEST** diesel engine-driven fire pump	8.3.1.1
Fire Pump – **TEST** electric fire pumps identified in 8.3.1.2.1	8.3.1.2
Monthly	**NFPA 25**
Common Components and Valves – **INSPECT** locked or supervised control valves	Chapter 13
Fire Pump – **TEST** all other electric fire pumps	8.3.1.2
Sprinkler System – **INSPECT** gauges on dry and preaction systems	Chapter 13
Quarterly	**NFPA 25**
Common Components and Valves – **INSPECT** fire department connections, pressure-reducing/relief valves for sprinkler systems, supervisory signal devices, hose valves	13.8.1 13.5.1.1 13.2.8.1 13.6.1
Common Components and Valves – **TEST** priming water/low air pressure alarm/quick-opening devices for dry pipe valves and pre-action valves, waterflow alarms	13.4.5.2 13.4.3.2.10 13.2.6
Fire Pump – **TEST** fuel tank, float switch, and supervisory signal for interstitial space	8.1.1.2.7
Private Fire Service Main – **INSPECT** hose houses	7.2.2.7
Sprinkler System – **INSPECT** gauges for wet and deluge systems	Chapter 13
Sprinkler System – **INSPECT** supervisory signal devices, valve supervisory switches, waterflow alarm devices	5.2.4
Sprinkler System – **TEST** mechanical waterflow alarm devices	5.3.2.1

Semi-Annually	NFPA 25
Common Components and Valves – **INSPECT** valve supervisory signal initiating devices	13.3.2.1.3
Fire Pump – **TEST** diesel fuel	8.3.4
Private Fire Service Main – **INSPECT** monitor nozzles	7.2.2.6
Sprinkler System – **TEST** waterflow alarm devices (vane and pressures switch type)	5.3.2.2
Annually	**NFPA 25**
Retain written records as per On-Site Retention of Records	
Common Components and Valves – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 13.1.1.2
Fire Pump – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 8.1.1.2
Private Fire Service Main – **MAINTAIN** hose houses, hydrants, mainline strainers, monitor nozzles	7.2.2 7.4
Private Fire Service Main – **TEST** hydrant and monitor nozzle flow	7.3
Private Fire Service Main – **INSPECT** hydrants, mainline strainers, exposed piping	7.2.2
Sprinkler System – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 5.1.1.2
Standpipe and Hose System – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 6.1.1.2
Every 5 Years	**NFPA 25**
Common Components and Valves – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 13.1.1.2
Fire Department Connection – Hydrostatic **TEST** of piping from FDC to check valve	13.8.5
Internal Piping Condition and Obstruction Investigation – Conduct **ASSESSMENT**	Chapter 14
Private Fire Service Main – **TEST** exposed and underground piping for flow	7.3.1
Sprinkler System – **TEST** gauges, extra high temperature solder-type sprinklers, sprinklers in harsh environments	Chapter 13 5.3.1.1.1
Sprinkler System – **TEST** sprinklers >75 years	5.3.1 **
Standpipe and Hose Systems – **TEST** flow, hydrostatic, and as per NFPA 1962, hose	6.3.1 6.3.2
Every 10 Years	**NFPA 25**
Sprinkler System – **REPLACE** or **TEST** dry sprinklers >10 years	5.3.1 **
Sprinkler System – **REPLACE** or **TEST** fast-response sprinklers >20 years	5.3.1 **
Sprinkler System – **REPLACE** or **TEST** sprinklers >50 years	5.3.1 **
At 75 Years	**NFPA 25**
Sprinkler System – **REPLACE** or **TEST** sprinklers >75 years and repeat test every 5 years	5.3.1 **

Fire Safety Maintenance Requirements

Water Storage Tanks (Chapter 9)

Daily	NFPA 25
INSPECT heating systems for tanks without supervised low temperature alarm	9.2.2.2
Weekly	**NFPA 25**
INSPECT heating systems for tanks with supervised low temperature alarm connected to constantly attended location	9.2.2.1
INSPECT unsupervised temperature alarms	9.2.4.3
INSPECT water temperature for tanks without supervised low-temperature alarms	9.2.4.3
Monthly	**NFPA 25**
Automatic Tank Fill Valve – **INSPECT** exterior	13.4.3.1.3
INSPECT unsupervised temperature alarms	9.2.4.3
INSPECT water temperature for tanks without supervised low-temperature alarms	9.2.4.3
INSPECT air pressure on tanks without a supervised air pressure source	9.2.2.2
INSPECT supervised temperature alarms	9.2.3.2
INSPECT water level for unsupervised tanks	9.2.1.2
INSPECT water temperature for tanks with supervised low temperature alarms	9.2.4.2
TEST high temperature limit switches, low water temperature alarms	9.3.3 9.3.4
Quarterly	**NFPA 25**
INSPECT air pressure for supervised air pressure sources, catwalks and ladders, support structure, surrounding area, tank exterior, water levels for tanks equipped with a supervised water level alarm	9.2.2.1 9.2.4 9.2.1.1
Semi-Annually	**NFPA 25**
TEST water level alarms	9.3.5
Annually	**NFPA 25**
Automatic Tank Fill Valve – **INSPECT** interior, **TEST** valve	13.4.3.1.4 9.5.3
Water Storage Tank – **INSPECT**, **TEST** and **MAINTAIN**	Per Table 9.1.1.2
Every 3 Years	**NFPA 25**
INSPECT steel tanks without corrosion protection	9.2.5.1.1
Every 5 Years	**NFPA 25**
Automatic Tank Fill Valve – **INSPECT** strainers, filters, orifices (inspect/clean)	13.4.1.2
INSPECT interior (all other tanks), **TEST** level indicator, pressure gauges	9.2.5.1.2 9.3.1 Chapter 13

Testing of Sprinklers Heads **

Where required by sections marked with **, sample sprinklers shall be submitted to a recognized testing laboratory acceptable to the AHJ for field service testing.

Obtaining NFPA 25 and Information Regarding Your Fire Protection System

Installing contractors of sprinkler and standpipe systems are responsible for providing the property owner (or the owner's authorized representative) with the following:

(1) All literature and instructions provided by the manufacturer describing proper operation and maintenance of any equipment and devices installed.
(2) A copy of NFPA 25 (when installing new systems)

Maintenance of Fire Protection Devices within Residential Suites of Multi-Family Buildings

Annual maintenance of fire protection devices within residential suites of multi-family buildings by qualified persons is required **once in four-year cycle**.

If owners opt to apply the requirements of this, they become responsible for visual inspections only, and testing where the device has features that provide for end- user testing (*smoke alarms* are the exception, and suite owners have responsibilities to ensure that inspection, testing and maintenance occur as required).

Who is Qualified?

In most cases, inspection, testing and maintenance may only be performed by qualified personnel. When in doubt contact LFES Fire Prevnetion Bureau via 311 for clarification.

Only journeyperson sprinkler installers are considered qualified in the inspection, testing and maintenance of water-based fire suppression systems installed to NFPA 13, NFPA 13R standards or NFPA 14 standards.

NFC(AE) Div. C 2.2.4.4

Water storage tanks for water-based fire protection systems must be maintained with consideration for cold-weather climates.

Fire Safety Maintenance Requirements

Emergency Planning

From Division B, Section 2.8

Since AFC 2014, the building owner is responsible for preparing a fire safety plan, acceptable to the LFES Fire Prevention Bureau, and appointing supervisory staff to carry out the same in all buildings with public assembly, care, treatment or detention, all buildings equipped with a fire alarm, demolition and construction sites, storage areas required to have a fire safety plan, areas where flammable liquids or combustible liquids are stored or handled, and areas where hazardous processes or operations occur.

Subsection 2.8.1 – General

Article 2.8.1.1 – Application

2.8.1.1.(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.

Article 2.8.1.2 – Training of Supervisory Staff

2.8.1.2.(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)**)

Article 2.8.1.3 – Keys and Special Devices

2.8.1.3.(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* or located in fire department key boxes conforming to Article 2.5.1.3.

Subsection 2.8.2 – Fire Safety Plan

Article 2.8.2.1 – Measures in a Fire Safety Plan

2.8.2.1.(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 used 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 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)**),
  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 in their responsibilities for 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)**)

2.8.2.1.(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*.

Article 2.8.1.2 – Care, Treatment and Detention Occupancies

2.8.1.2.(1) 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).

Article 2.8.2.3 – Assembly Occupancies

2.8.1.2.(3) 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.(3)(a) whenever the building is open to the public.

Fire Safety Maintenance Requirements

Article 2.8.2.2 – High Buildings

2.8.2.2.(1) In 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.

Article 2.8.2.12 – Retention of Fire Safety Plans

2.8.2.12.(1) The fire safety plan shall be kept in the building for reference by the fire department, supervisory staff and other personnel.

2.8.2.12.(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.

2.8.2.12.(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.

Article 2.8.2.13 – Distribution

2.8.2.13.(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.

Article 2.8.2.14 – Posting of Fire Emergency Procedures

2.8.2.14.(1) At least one copy of the fire emergency procedures shall be prominently posted on each floor area.

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

2.8.2.14.(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.

2.8.2.14.(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.

Article 2.2.7.2 – Shutdown of Fire Alarm Systems

2.2.7.2.(2) If a fire alarm and detection system, or part thereof, is inoperative for more than 2 hours for any reason, the *owner* shall notify the fire department, and when directed, provide acceptable surveillance within the *building* continuously until the fire alarm and detection system is restored to operating condition.

2.2.7.2.(3) Procedures acceptable to the fire department shall be developed to notify occupants if a fire or other emergency occurs while the fire alarm and detection system is inoperative. (**See Note A-2.2.7.2.(3)**)

Subsection 2.8.3 – Fire Drills

Article 2.8.3.1 – Fire Drill Procedures

2.8.3.1.(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)**)

Article 2.8.3.2 – Fire Drill Frequency

Holding of Fire Drills – Subsection 2.8.3	Frequency
Retain written records as per On-Site Retention of Records	
For supervisory staff in daycare centers and healthcare centers	Monthly
For schools attended by children, total evacuation drills must be conducted	3x in Fall term 3x in Spring term
For supervisory staff in laboratories	Every 3 months
For supervisory staff in High Buildings	Every 2 months
For supervisory staff in all other buildings	Annually

Additional special requirements for fire safety plans for the following situations may be found in the NFC(AE) for storage of dangerous goods, indoor & outdoor storage including storage of tires, spill control/drainage systems for flammable and combustible liquids, hazardous processes and operations, construction and demolition sites.

Fire Safety Maintenance Requirements

Emergency Planning – Notes

These notes are included for explanatory purposes only.

A-2.8.1.2.(1) – Training of Supervisory Staff

Adequately trained supervisory staff can be of great value in directing people to move in an orderly fashion in the event of a fire and in carrying out appropriate fire control measures until the public fire department arrives. These measures are, as described in the fire safety plan, developed in cooperation with the fire department. The supervisory staff referred to in this Section are assigned their responsibilities by the building owner, unless the public fire department is prepared to take on these responsibilities. Except in hospitals and nursing homes, it is not intended that supervisory staff should be in the building on a continuous basis, but that they should be available to fulfill their obligations as described in the fire safety plan on notification of a fire emergency. In hospitals and nursing homes, however, staff must be in the building at all times to assist occupants who are not capable of caring for themselves in an emergency.

A-2.8.2.1.(3)(a)(i) – Sounding the Fire Alarm

These procedures should also include training authorized personnel to silence fire alarm and alert signals under specified conditions. If special keys or devices are required to operate the alarm system, they should be readily available to supervisory staff on duty.

A-2.8.2.1.(3)(a)(iv) – Evacuating Occupants, including Special Provisions for Persons Requiring Assistance

Some occupants of a building may require special assistance during evacuation because cognitive or physical limitations make them unable to proceed independently to a place of safety. Fire safety for these persons will depend to a large extent on preplanning and on their awareness of the fire protection measures incorporated into the building. In some buildings, it may be appropriate to advise such occupants of these provisions by posted notices, handouts or other suitable means. In certain residential occupancies, such as hotels or motels, staff should be aware of rooms occupied by persons requiring special assistance during evacuation and should inform the responding fire department.

A-2.8.2.1.(3) – Inspection and Maintenance of *building* Facilities Provided for the Safety of Occupants

The fire safety plan may provide important information to the fire department for use in the preparation of plans for firefighting procedures in specific buildings. This is especially true for buildings where flammable or combustible liquids or other dangerous goods are stored.

The development of the fire safety plan for large retail occupancies, especially the bulk merchandising stores, should take into consideration various unique risk factors prevalent in these stores. A bulk merchandising store is characterized as a retail store in which the sales area includes the storage of material usually located in piles, on pallets or on racks up to 3.7 metres in storage height. These mercantile occupancies tend to store and display in the sales area, large quantities of products ranging from compressed gas cylinders, oxidizers, flammable liquids, combustible liquids, foamed plastics, and combustible materials.

Documented evidence of fires in these types of stores has shown that smoke obscuration occurs within 7.5 to 12 min from the inception of a fire. Prompt response by occupants in a fire emergency is therefore critical. Human behaviour studies have shown that occupants in a retail environment tend to delay evacuation for various reasons such as unfamiliarity with exits or a lack of visibility of exits, reluctance to leave check-out lines, and uncertainty about the events unfolding. The training and education of staff are crucial elements in clearly notifying and instructing occupants during an emergency. A reliable public address system should be an integral part of the fire safety plan.

Furthermore, although the Code does not address the use of mass notification systems, many organizations integrate them into their fire alarm and public address systems. Mass notification systems provide real-time notification and instructions to persons in a building or series of buildings, a campus, a community or similar areas using a series of voice communications, signals, and text or phone messages to communicate the appropriate actions and responses in the event of an emergency situation.

Where such systems are installed, the authority having jurisdiction should be consulted to ensure that the interconnection and cross-communication with other Code-prescribed life safety systems (e.g. fire alarm systems) is well coordinated and understood. The sequencing of events must be carefully prioritized to ensure that persons are not given instructions that are contrary to the life safety requirements of the Code.

Note that, where strobes are used in mass notification systems, consideration should be given to ensure that all strobes, including those for the fire alarm system, are synchronized.

The fire safety plan should be commensurate with the known risks and address the concerns identified above.

A-2.8.7.2.(3) – Interruption of the Fire Alarm System

Interruption of normal automatic operation of the fire alarm system for periodic testing purposes constitutes a "temporary shutdown". Appropriate alternative measures for informing building occupants and the fire department of a fire during a shutdown of a fire alarm system should be worked out in cooperation with the local fire department. The alternative measures decided upon should be recorded as part of the building fire safety plan.

A-2.8.3.1.(1) – Fire Drills

A fire safety plan is of little value if it is not reviewed periodically so that all supervisory staff remain familiar with their responsibilities. A fire drill, then, is at least a review of the fire safety plan by supervisory staff. The extent to which non-supervisory staff participate in a fire drill should be worked out in cooperation with the fire department. The decision as to whether all occupants should leave the building during a fire drill should be based on the nature of the occupancy.

It may be necessary to hold additional fire drills outside normal working hours for the benefit of employees on afternoon or night shifts, who should be as familiar with fire drill procedures as those who work during the day. If full scale fire drills are not possible during non-regular working hours, arrangements should be made so that night-shift supervisory staff can participate in fire drills conducted during the daytime.

Fire Safety Maintenance Requirements

Appendix A: On-Site Records Checklist

This checklist should be referred to annually when reviewing to ensure that all required records are present in the "Life Safety Records" binder.

Reviewed By: _____

(full name, printed)

Date Reviewed: _____

(month, day, year)

Emergency Generator	☐ Not Applicable
☐ Initial Startup-Test & Acceptance Documents	
☐ Two (2) Years of Weekly Checks as per CSA C282 Table #2, For Health Care Facilities, also Table #3	
☐ Last 24 Monthly Maintenance Records as per Table #3	
☐ Last Four (4) Semi-Annual Maintenance as per Table #4	
☐ Current and Previous Annual Maintenance as per Table #5	
☐ Current and Previous 5-Year Maintenance as per Table #6	

Fire Alarm	☐ Not Applicable
☐ Engineered Drawings (retain for life of system)	
☐ As-built Drawings (retain for life of system)	
☐ Verification Document by Professional Engineer, and CAN/ULC S537 Report (retain for life of system)	
☐ Last 24 Monthly Test Records as per CAN/ULC-S536	
☐ Current and Previous Annual Inspection, Testing & Maintenance as per CAN/ULC-S536	

Commercial Cooking Exhaust & Fire Suppression Systems	☐ Not Applicable
☐ Engineered Drawings (retain for life of system)	
☐ Initial Acceptance Test, and Verification Document by Professional Engineer (retain for life of system)	
☐ Last Four (4) Semi-Annual Cleaning Reports for Commercial Cooking Exhaust Systems, or for Churches, Day Camps, Seasonal Last (2) Annual Cleaning Reports	
☐ Last Four (4) Semi-Annual Maintenance Records for Commercial Cooking Suppression Systems	
☐ Last Four (4) Semi-Annual Maintenance Records for All Other Special Suppression Systems	

Doors Equipped with Electromagnetic Locks	☐ Not Applicable
☐ Current and Previous Annual Records (see this document for testing requirements)	

Emergency Lighting including Unit Equipment	☐ Not Applicable
☐ Current and Previous Annual Records as per CSA C282 and NFC(AE) Div. B 6.5.1.7, 6.5.1.7	

Make-up Air Systems and CO/N2O Detectors in Enclosed Parkades	☐ Not Applicable
☐ Current and Previous Annual Tests Records	

Water-Based Fire Protection Systems	As applicable
☐ Engineered Drawings (retain for life of system)	
☐ As-built Drawings (retain for life of system)	
☐ Verification Documents (retain for life of system)	
Sprinkler Systems	
☐ Current and Previous Annual Inspection, Testing & Maintenance	
☐ Current and Previous 3-year Full Flow Trip Test for Dry Systems	
☐ Current and Previous 5-year Internal Piping Condition Report	
☐ Current and Previous 5-year Flow Tests for Sprinkler Pressure Reducing Valves, Hose Connection Pressure-Regulating Devices and Hose Rack Assembly Pressure-Regulating Devices	
Standpipe and Hose Systems	
☐ Current and Previous Annual Inspection, Testing & Maintenance	
☐ Current and Previous 5-year Internal Piping Condition Reports	
☐ Current and Previous 5-year Standpipe Flow Test Reports	
☐ Current and Previous 5-year Fire Hose Hydrostatic Test Reports	
Private Fire Service Mains	
☐ Current and Previous Annual ITM for Private Hydrants	
☐ Current and Previous 5-year Flow Test for Underground and Exposed Piping	
Fire Pumps	
☐ Current and Previous Annual Inspection, Testing & Maintenance	
☐ Current and Previous 3-year Full Flow Test Reports	
☐ Two (2) Years of Pump Assembly Maintenance Reports per 8.5	
Water Storage Tanks	
☐ Current and Previous Annual Inspection, Testing & Maintenance	
☐ Current and Previous 5-year Interior Tank Inspection Report (3-year report required for steel tanks without corrosion protection)	
Common Components and Valves	
☐ Current and Previous Annual Inspection, Testing & Maintenance	
☐ Current and Previous 5-year Hydrostatic Test Report for Fire Department Connection(s)	

Fire Safety Maintenance Requirements

Revision History

Major revisions to this document are detailed below. With the exception of the most recent publication all other revisions are considered to be withdrawn. LFES Fire Prevention Bureau reserves the right to modify or adjust this document without notice.

Publication Date	Details
August 14, 2024	New Document
March 24, 2025	Revision