
Changes to the National Fire Code – 2023 Alberta Edition (NFC(AE))

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Agenda

Updates to Division A

New items in NFC(AE) - 2023 Alberta
Edition

Articles that have been harmonized



Updates to Division C

DISCLAIMER

- In the event of any discrepancy between the information throughout this presentation and the Safety Codes Act, National Fire Code – 2023 Alberta Edition and the National Building Code – 2023 Alberta Edition, the legislation is considered correct.

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Updates to Division A

Changes in Division A, Part 1

NFC(AE)



NFC(AE) - 2023

1.1.1.1. Application of this Code
(See Note A -1.1.1.1.(1).)

1.1.1.1. Application of this Code
(See Note A -1.1.1.1.(1).)

A-1.1.1.1.(1) Application of this Code. This Code applies to buildings and facilities, whether occupied or vacant. For the purposes of Sentence 1.1.1.1.(1), the term “facilities” is used in its broadest sense to include all premises that are not included in the definition of “building” in this Code, such as outdoor and underground areas, **including areas for outdoor special events**, structures and equipment. Such “facilities” are often associated with storage, distribution and manufacturing activities. ...

Changes in Division A, Part 1

NFC(AE)

NFC(AE) - 2023

Division B

4.1.1.1. Application

3) This Part shall not apply to

- a) the transportation of *flammable liquids* or *combustible liquids* under TC SOR/2016-95, "Transportation of Dangerous Goods Regulations (TDGR),"
- b) the storage of *flammable liquids* or *combustible liquids* on farms for individual farm use and on isolated construction projects (see Note A-4.1.1.1.(3)(b)),
- c) the storage of aerosol products covered under Subsection 3.2.5.,
- d) liquefied petroleum gas-burning *appliances* and equipment within the scope of the gas regulations made pursuant to the Safety Codes Act,
- e) the production, storage or handling of liquefied natural gas within the scope of the gas regulations made pursuant to the Safety Codes Act,
- f) liquids such as certain halogenated hydrocarbons and mixtures containing hydrocarbons which are without *flash points* but which may be flammable under certain conditions, or
- g) the storage and handling of raw production *flammable liquids* or *combustible liquids* and the incidental storage and handling of hydrocarbon-based chemicals resulting from or used during crude oil or natural gas exploration, production or transmission as mandated under the scope of AER Directive 055, "Storage Requirements for the Upstream Petroleum Industry."

1.1.1.1. Application of this Code

2) Part 4 of Division B of this Code does not apply to

- a) the storage of *flammable liquids* or *combustible liquids* on farms for individual farm use and on isolated construction projects (see Note A-1.1.1.1.(2)(a)),
- b) the storage of aerosol products covered under Subsection 3.2.5. of Division B,
- c) liquefied petroleum gas-burning appliances and equipment within the scope of the gas regulations made pursuant to the Safety Codes Act,
- d) the production, storage or handling of liquefied natural gas within the scope of the gas regulations made pursuant to the Safety Codes Act,
- e) liquids such as certain halogenated hydrocarbons and mixtures containing hydrocarbons which are without flash points, but which may be flammable under certain conditions,
- f) the storage and handling of raw production *flammable liquids* or *combustible liquids* and the incidental storage and handling of hydrocarbon-based chemicals resulting from or used during crude oil or natural gas exploration, production or transmission as mandated under the scope of AER Directive 055, "Storage Requirements for the Upstream Petroleum Industry," or
- g) spills and leaks pertaining to products other than *flammable liquids* and *combustible liquids* that do not fall within the requirements of Section 4.3. of Division B. (See Note A-1.1.1.1.(2)(g)).



What's new in the NFC(AE) – 2023 Alberta Edition – Division B

Overview:

- 1) Reference Standards
- 2) Encapsulated Mass Timber Construction (EMTC)
- 3) Home-type Care Occupancy (B4)
- 4) Emergency Planning
- 5) Water-miscible Liquids
- 6) Additions to Part 4
- 7) Farm Buildings

Reference Standards in NFC(AE) - 2023

Note: NFPA and ULC have updated some Standard names to include “Standard for...” or “Recommended Practice for...”

eg. NFPA 10 is now called **Standard for** Portable Fire Extinguisher

CAN/ULC-S603 is now called **Standard for** Steel Underground Tanks for Flammable and Combustible Liquids

New standards

- **ANSI/CAN/UL/ULC 2258, “Standard for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids”** replaces ULC/ORD-C80.1, “Non-metallic Tank for Oil Burner Fuels and Other Combustible Liquids” and CAN/ULC-S670, “Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids.”
- **ULC CAN/ULC-S540-13 Standard for Residential Fire and Life Safety Warning Systems: Installation, Inspection, Testing and Maintenance**
- **CAN/ULC-S669, “Standard for Internal Retrofit Systems for Underground Tanks for Flammable and Combustible Liquids”** replaces ULC/ORD-C58.4, “Double Containment Fibre Reinforced Plastic Linings for Flammable and Combustible Liquid Storage Tanks.”
- **CAN/ULC-S679, “Standard for Metallic and Nonmetallic Underground Piping for Flammable and Combustible Liquids”** replaces CAN/ULC-S660, “Nonmetallic Underground Piping for Flammable and Combustible Liquids” and CAN/ULC-S667, “Metallic Underground Piping for Flammable and Combustible Liquids.”

Encapsulated Mass Timber Construction (EMTC)

- Most of the information was included in previous STANDATA.
- Two new definitions have been included in Defined Terms.
 - Encapsulated mass timber construction
 - Encapsulated rating
- New provisions in Part 2 for Damaged or Removed Encapsulation Materials.
- New provisions in Part 5 for construction and protection during construction.

Home-type Care Occupancy (B4)

Home-type care occupancy (Group B, Division 4) means the *occupancy* or use of a *building* consisting of a single detached housekeeping unit where *care* is provided to residents and may include the living space of the caregiver and their family.

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

2.1.3. Fire Safety Installations

2.1.3.3. Smoke Alarms

1) *Smoke alarms* conforming to CAN/ULC-S531, “Standard for Smoke Alarms,” shall be installed

a) in each *home-type care occupancy* and *dwelling unit*, except where the *building* has a residential fire warning system installed in conformance with the NBC(AE),

Home-type Care Occupancy (B4) cont.

2.1.5. Portable Extinguishers

2.1.5.1. Selection and Installation

- 1) Except as provided in Sentence (2), portable extinguishers shall be installed in all *buildings*.
- 2) Sentence (1) does not apply to *dwelling units*, unless the *dwelling unit* is a *home-type care occupancy*.

2.3.2. Flame Resistance

2.3.2.3. Textiles in Group B Occupancies

- 3) Mattresses, bed linen, window drapes and cubicle curtains need not comply with Sentences (1) and (2) if used in
 - a) *suites* in a *building of care occupancy*, or
 - b) *care occupancies* with not more than 10 residents.

2.8. Emergency Planning

- **2.8.1.1. Application** - New wording to amalgamate emergency planning from sections throughout NFC(AE) – 2019.
- New Articles under Emergency Planning that have been moved from other areas of the code.

2.8. Emergency Planning - New

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.

2.8.2.4. Indoor Storage of Combustible Products and Dangerous Goods

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,
- 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.

2.8. Emergency Planning - New

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*.

2.8.2.14. Posting of Fire Emergency Procedures

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

4.1.2. Classification

4.1.2.2. Water-Miscible Liquid Mixtures

(See Note A-4.1.2.2.)

1) For the purposes of this Part, mixtures of methanol, ethanol, 2-propanol, acetone or acetic acid and water shall be classified in conformance with Sentences (2) to (6).

2) A mixture of methanol and water shall be classified as

- a) a Class IB liquid if the concentration of methanol is 90% or more by volume,
- b) a Class IC liquid if the concentration of methanol is 30% or more but less than 90% by volume, or
- c) a Class II liquid if the concentration of methanol is 20% or more but less than 30% by volume.

3) A mixture of ethanol and water shall be classified as

- a) a Class IB liquid if the concentration of ethanol is 90% or more by volume,
- b) a Class IC liquid if the concentration of ethanol is 30% or more but less than 90% by volume, or
- c) a Class II liquid if the concentration of ethanol is 20% or more but less than 30% by volume.

4.1.2. Classification cont'd

- 4) A mixture of 2-propanol and water shall be classified as a Class IC liquid if the concentration of 2-propanol is 20% or more by volume.

- 5) A mixture of acetone and water shall be classified as a Class IB liquid if the concentration of acetone is 5% or more by volume.

- 6) A mixture of acetic acid and water shall be classified as a Class IB liquid if the concentration of acetic acid is 8% or more by volume.

4.3.1. Design, Construction and Use of Storage Tanks

4.3.1.10. Reuse

1) A *storage tank* that has been taken out of service shall not be reused for the storage of *flammable liquids* or *combustible liquids* unless it has been

a) refurbished so as to conform to one of the standards listed in Sentence 4.3.1.2.(1),

b) refurbished so as to conform to CAN/ULC-S676, “Standard for Refurbishing of Storage Tanks for Flammable and Combustible Liquids,”

c) refurbished in conformance with Sentence (2) or (3).

4.3.6. Openings Other Than Vents in Aboveground Storage Tanks

4.3.6.4 Connections for Filling and Emptying

4) Connections for filling or emptying *storage tanks* shall be provided with a spill containment device designed to catch, retain and provide for the evacuation of spilled *flammable liquids* or *combustible liquids* in conformance with CAN/ULC-S663, “Standard for Spill Containment Devices for Flammable and Combustible Liquid Aboveground Storage Tanks.”

4.3.15. Openings Other than Vents in Storage Tanks inside Buildings

4.3.15.1. Connections

3) Connections for filling or emptying *storage tanks* shall be provided with a spill containment device in accordance with Sentence 4.3.6.4.(4).

4.6.4. Shut-off Devices

4.6.4.1. Location and Identification

1) A device to shut off power to all dispensers and pumps shall be provided at a location not less than 6 m and not more than 30 m away from the dispensers and pumps. (See Note A-4.6.4.1.(1) and (2).)

Part 4 – Renumbered Articles

There are a few code provisions that have been renumbered to harmonize with the NFC 2020.

Some things are included elsewhere...

NFC(AE) Sentence	Additional location in NFC(AE) - 2023
<p>4.11.2.5. Damaged or Leaking Containers 1) Containers or <i>storage tanks</i> that leak or that have become damaged shall not be used to transport <i>flammable liquids</i> or <i>combustible liquids</i>.</p>	<p>Renumbered to 4.11.2.6.(1) and also included as 4.1.8.1.(4) under Article 4.1.8.1. Containers and Storage Tanks</p>

Farm Buildings

Farm buildings have been included in the NFC 2020 but are not included in the NFC(AE).

Harmonized Articles

Division A, Section 1.4. Terms and Abbreviations

1.4.1.1. Non-defined Terms (and 1.2.1.1.(4) Non-defined Terms in Division B)

5) For words not defined in this Code, the Safety Codes Act, the National Building Code – 2019 Alberta Edition, or the National Plumbing Code, reference should be made to the Oxford University Press 2004, “Canadian Oxford Dictionary, 2nd Edition.”

1.4.1.2 Defined Terms (Removed)

- *Cardlock*
- *Class B fire*
- *Fire brigade*
- *Firecracker*
- *Hot work*
- *Secondary suite*
- *Spill containment device*
- *Storage garage*

2.3.1.3 Decorative Materials and 2.3.1.5. Combustible Display Exhibit

Harmonized Sentences	Outcome
<p>2.3.1.3 Decorative Materials 2) In <i>assembly occupancies</i> and <i>care, treatment, or detention occupancies</i>, combustible materials used for festive decorations, including, but not limited to, crepe paper decorations, other combustible trimming or ornaments and Christmas trees, shall be of the flame-resistant type, or conform to CAN/ULC-S109, “Flame Tests of Flame-Resistant Fabrics and Films.” (See Note A-2.3.1.3.(2).)</p>	<p>Removed to harmonize - captured with STANDATA</p>
<p>3) Combustible materials, such as student artwork and teaching aids, attached to school classroom and <i>access to exit</i> walls and ceilings shall not exceed 20% of a wall or ceiling surface unless</p> <p>a) the combustible materials have been tested to CAN/ULC-S102, “Surface Burning Characteristics of Building Materials and Assemblies,” and</p> <p>b) the <i>flame-spread rating</i> does not exceed that required for the interior finish of the space in which they are located.</p>	<p>Removed to harmonize - captured with STANDATA</p>
<p>2.3.1.5. Combustible Display or Exhibit 1) No person shall operate or install a combustible display or exhibit in a Group A, Division 1, 2 or 3 <i>major occupancy</i> unless the <i>building</i> is protected by an automatic sprinkler system designed and installed in conformance with the NBC(AE) or until precautions have been taken to protect the occupants from the hazards of fire. (See Note A-2.1.2.2.(1).)</p>	<p>Removed to harmonize - captured with STANDATA</p>
<p>2) An arena-type <i>building</i> intended for occasional use for trade shows and similar exhibition purposes shall be classified in accordance with the NBC(AE).</p>	<p>Removed to harmonize - captured with STANDATA</p>

2.4.1.3. Waste Receptacles

Harmonized Sentences	Outcome
<p>5) Receptacles for combustible recyclable material having a capacity greater than 0.250 m³ used within a building shall be</p> <ul style="list-style-type: none">a) of noncombustible, fully enclosed construction with a tight-fitting lid, orb) located in a storage room conforming to Article 2.4.1.2.	Removed to harmonize – similar information in these Sentences are typically included in best practices.
<p>6) Unless acceptable to the <i>authority having jurisdiction</i>, only two receptacles for combustible recyclable materials per <i>suite</i> shall be permitted in an unsprinklered <i>building</i>.</p>	
<p>7) Within a <i>sprinklered building</i>, a concentration of individual receptacles for combustible recyclable paper product, plastics, metal and glass material having an aggregate capacity greater than 5 m³ shall be located</p> <ul style="list-style-type: none">a) in a manner acceptable to the <i>authority having jurisdiction</i>, orb) in a storage room conforming to Article 2.4.1.2.	
<p>8) Receptacles for combustible recyclable paper product, plastics, metal and glass shall be located in <i>buildings</i> so as not to obstruct a <i>means of egress</i> or any fire protection equipment including, but not limited to, fire alarm pull stations, portable extinguishers, and sprinkler or standpipe hose connections.</p>	
<p>9) Receptacles for recyclable material shall be emptied when full.</p>	

2.7.1.3. Occupant Load

Harmonized Sentences	Outcome
<p>1) The maximum permissible <i>occupant load</i> for any room shall be calculated on the basis of the lesser of</p> <ul style="list-style-type: none">a) the number of occupants determined in accordance with Table 3.1.17.1. of Division B of the NBC(AE),b) the <i>occupant load</i> for which <i>means of egress</i> are provided, orc) the <i>occupant load</i> as calculated and posted in accordance with the NBC(AE). (See Note A-2.7.1.3.(1).)	Remove to harmonize - with STANDATA
<p>3) The <i>owner</i> shall ensure that a plan showing the floor layout and designed use of the rooms specified in Sentence (1) is made available in conformance with Article 2.2.1.2. of Division C.</p>	

4.3.1.7. Identification

Harmonized Sentences	Outcome
<p>2) The contents of every aboveground <i>storage tank</i> shall be clearly identified by signs with letters of sufficient size to ensure legibility from not less than 4.5 m or from outside a diked area, whichever is greater.</p>	<p>Harmonized as duplicated what is in Sentence (1).</p>
<p>3) Signs installed in accordance with Sentence (2) shall be located on at least two sides of a <i>storage tank</i>.</p>	<p>Harmonized as duplicated what is in Sentence (1).</p>

4.3.13.2. Stationary Combustion Engines

Harmonized Sentences	Outcome
<p>1) <i>Storage tank systems using</i> Class I liquids as fuel supplies for stationary engines inside <i>buildings</i> shall conform to this Part when they are used to supply appliances installed in conformance with NFPA 37, “Installation and Use of Stationary Combustion Engines and Gas Turbines.”</p>	Harmonized
<p>2) <i>Storage tank systems</i> for Class II and IIIA liquids inside <i>buildings</i> shall conform to this Part when they are used to supply appliances installed in conformance with CSA B139, “Installation Code for Oil-Burning Equipment.”</p>	Remove to harmonized – This information is covered in Clause 4.1.1.1.(3)(b) in NFC(AE) - 2023 b) appliances and their ancillary equipment within the scope of CSA B139 Series, “Installation code for oil-burning equipment,” except for aboveground storage tanks with an individual capacity exceeding 2 500 L (see Note A-4.1.1.1.(3)(b)),

4.5.6.6. Installation of Underground Piping

Harmonized Sentence	Outcome
2) Where applicable, <i>spill containment sumps</i> shall be installed in accordance with Subsection 4.3.9.	Harmonized – information is covered in 4.3.9.2.

4.6.7.1. Spill Control

Harmonized Sentence	Outcome
<p>2) Contaminated absorbent materials used during the cleanup of <i>flammable liquid</i> and <i>combustible liquid</i> spills shall be stored in a <i>storage tank</i> or <i>closed container</i> conforming to this Part until removed from the premises.</p>	<p>Harmonized – information is covered in 4.1.6.3.</p>

4.6.8.4. Card or Key-activated Dispensers

Harmonized Sentence	Outcome
<p>3) Operation of card- or key-activated dispensers shall be restricted to persons authorized by the supply agent to possess a card or key to operate the dispensers, provided</p> <ul style="list-style-type: none">a) the card or key issuer provides, on an annual basis, card or key holders with a detailed training package on the requirements including safe operating and emergency procedures,b) the card or key issuer notifies card or key holders that, in order to use the card or key facilities, the card or key holder must train all card or key users on the requirements of the document and maintain a record of the training,c) the card or key holder maintains a training record for each person authorized by the card or key holder to dispense product in accordance with the requirements of this document, andd) training records referred to in this Sentence are retained in conformance with Article 2.2.1.2. of Division C. <p>(See Note A-4.6.8.4.(3).)</p>	Harmonized

4.6.8.5. Duties of Attendants

Harmonized Sentence	Outcome
<p>3) Attendants shall be trained on how to conduct their duties, including</p> <ul style="list-style-type: none">a) inventory reconciliation practices,b) proper and safe product transfer procedures, andc) responsibilities identified in this Code.	<p>Harmonized – this should be covered in company training</p>

4.11.2.2. Hot Works

Harmonized Sentence	Outcome
2) No person shall smoke or use open flame within 7.5 m of a <i>tank vehicle</i> that is being loaded, unloaded or repaired.	Harmonized – information is covered under 4.1.5.2. Ignition Sources and 4.1.4.3. Smoking

6.3.1.2. Inspection and Testing

Harmonized Sentences	Outcome
<p>3) The requirements for annual smoke detector sensitivity testing outlined in Subsection 6.7.4. of CAN/ULC-S536, “Inspection and Testing of Fire Alarm Systems,” shall not apply until a smoke detector has been in place for 10 years. (See Note A-6.3.1.2.(3).)</p>	Removed to harmonize
<p>4) Smoke detectors, other than those which are automatically tested by the fire alarm system, shall be</p> <ul style="list-style-type: none">a) replaced within ten years of their manufacture with a smoke detector listed for use with the fire alarm system and appropriate for the location, orb) from the time they reach ten years of age and onward, tested annually for sensitivity in conformance with the methods prescribed in Subsection 6.7.4. of CAN/ULC-S536, “Inspection and Testing of Fire Alarm Systems.” <p>(See Note A-6.3.1.2.(4).)</p>	Removed to harmonize

6.3.1.5. Signal Transmission

Harmonized Sentence	Outcome
1) If a fire alarm or sprinkler system is required to transmit a signal to the fire department in conformance with the NBC(AE), the connection shall be operational at all times.	Removed to harmonize

The Wonderful World of Division C

Division C Changes – Part 2

Article 2.2.1.1. Application
Subsection 2.1.2. Prohibited

2.1.1.1. Application

NFC(AE)	NFC(AE) - 2023
	2) The submission of information for any registry or information system established for the purposes of Subsection 2.2.4. shall be mandatory.
Division B, 2.1.3.3. Smoke Alarms 4) Smoke alarms are permitted to be battery-operated in dwelling units constructed before July 5, 1977. (See Note A-2.1.3.3.(4).)	4) Smoke alarms are permitted to be battery-operated in dwelling units constructed before July 5, 1977

Division C Changes – Part 2

Subsection 2.1.2. Prohibited

- 2.1.2.1. Firecrackers and Pyrotechnic Devices
- 2.1.2.2. Flying or Sky Lanterns
- 2.1.2.3. Open Air Fires
- 2.1.2.4. Exit Doors and Door Release Hardware
- 2.1.2.5. Storage in Basements
- 2.1.2.6. Fuel Delivery or Removal from Storage Tanks
- 2.1.2.7. Fire Protection Equipment

NFC(AE)

5.1.1.4. Prohibited is now ...

NFC(AE) - 2023

2.1.2.1. Firecrackers and Pyrotechnic Devices

- 1) No person shall have in his possession, sell, offer for sale, give away or otherwise distribute, discharge, fire or set off firecrackers.

- 2) No person shall purchase, store, use or supervise the use of a pyrotechnic device, unless
 - a) the pyrotechnic device conforms to the requirements of NRCan R.S.C., 1985, c. E-17, “Explosives Act” and its Regulations,
 - b) the person is certified in accordance with NRCan R.S.C., 1985, c. E-17, “Explosives Act” and its Regulations, and
 - c) a person has permission from the local authority having jurisdiction.

NFC(AE)

19-FCI-012 – Sale and Use of Flying or Sky
Lanterns

NFC(AE) - 2023

2.1.2.2. Flying or Sky Lanterns

1) No person shall sell or use flying or sky lanterns in Alberta. (See Note A-2.1.2.2.(1).)

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A-2.1.2.2.(1) A flying or sky lantern resembles a small paper hot-air balloon that is fuelled by an open flame. When the fuel source is ignited, the hot air produced by the fuel source can lift the lantern to extreme heights and allows it to drift long distances until the fuel supply is depleted. These lanterns are often released in large numbers to generate an impressive visual effect. Due to their uncontrolled and unpredictable flight path, they can land in trees, on building rooftops or on other combustible properties while still ignited and have significant potential to cause a fire.

Flying or sky lanterns do not meet the intent of Sentence 2.4.3.3.(1) of Division B and their use creates a potentially uncontrolled, unsafe condition. As these products do not meet the requirements of the NFC(AE) or Section 9 of the Safety Codes Act, flying or sky lanterns are not acceptable for sale or use in Alberta.

Fire officials who come across these products being sold or used are requested to advise those involved that these products are not acceptable for sale or use and that these products must be removed from sale and returned to the supplier or destroyed.

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2.4.5.1.(2) Open Air Fires is now ...

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2.1.2.3. Open Air Fires

1) No person shall use a solid-fuel-fired barbecue in a *building* or on the balcony of a *building* containing more than 2 *dwelling units*.

NFC(AE)

2.7.2.1. Exit Doors and Door Release Hardware

6) Door release hardware, latches and locks shall be maintained in good working condition at all times.

7) An *exit* door shall not be bolted, barred or locked other than with a device that complies with Sentence (5).

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2.1.2.4. Exit Doors and Door Release Hardware

1) An *exit* door shall not be bolted, barred or locked other than with a device that complies with the NBC(AE). In addition, all door release hardware, latches and locks shall be maintained in good working condition at all times.

NFC(AE)

3.1.5. Basements

3.1.5.1.(1) Use is now

NFC(AE) - 2023

2.1.2.5. Storage in Basements

1) A *basement* shall not be used for the storage, manufacture or handling of volatile solids, liquids or gases that generate explosive air-vapour mixtures or for processes that involve explosive dusts.

NFC(AE)

4.3.1.9. Installation and Use

2) Except for *storage tanks* being withdrawn from service in accordance with Subsections 4.3.15. and 4.3.16., no person shall deliver or remove *flammable liquids* or *combustible liquids* to or from a storage tank, unless

- a) the *storage tank* is registered in accordance with Article 2.2.5.2. of Division C, and
- b) the registration certificate is displayed as required by Sentence 2.2.5.2.(5) of Division C.

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2.1.2.6. Fuel Delivery or Removal from Storage Tanks

1) Except for *storage tanks* being withdrawn from service in accordance with Subsections 4.3.15. and 4.3.16. of Division B, no person shall deliver or remove *flammable liquids* or *combustible liquids* to or from a *storage tank*, unless **the *storage tank* meets the inventory control requirements prescribed by the *authority having jurisdiction* or Alberta Safety Codes Authority.**

NFC(AE)

2.2.6. Fire Protection Equipment

2.2.6.1.(1) Fire Protection Equipment is now...

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2.1.2.7. Fire Protection Equipment

1) No person shall tamper with or vandalize portable extinguishers, water-based fire protection systems, special fire extinguishing systems, fire alarm systems, emergency electrical power supply systems, emergency lighting or fire protection equipment.

2) Portable extinguishers, water-based fire protection systems, special fire extinguishing systems, fire alarm systems, emergency electrical power supply systems, emergency lighting and fire protection equipment shall be unobstructed and accessible at all times.

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2.1.2.7. Fire Protection Equipment

3) No portable fire extinguishers shall be allowed for sale, distribution, use, and servicing in Alberta unless they are listed and labelled in accordance with NFPA 10, “Standard for Portable Fire Extinguishers.” (See Note A -2.1.2.7.(3).)

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2.1.2.7. Fire Protection Equipment

- 4)** No portable fire extinguishers shall be allowed for sale, distribution, use, or servicing in Alberta unless they comply with all of the following:
- a) labels shall have metric measures and may have imperial equivalents,
 - b) labels shall be bi-lingual in English/French and may represent additional languages,
 - c) labels shall indicate which CAN/ULC standard the portable extinguisher is in conformance with (e.g. CAN/ULC S504), and
 - d) extinguishers shall exhibit the mark of a certification body as being in conformance with one of the referenced national standards (CAN/ULC) and this mark will most typically be that of ULC.

NFC(AE)

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2.1.7.7. Fire Protection Equipment

A-2.1.2.7.(3). There are aerosol, point-and-spray extinguishing devices and portable fire extinguishers on the market that only have ULC certification for the wetting agent and not for the extinguisher as a whole. These devices are not considered certified or listed with ULC and are not acceptable for sale, use and servicing within Alberta.

Division C Changes – Part 2

Section 2.2. Administration

2.2.1. General

2.2.2. Interpretations and Variances

2.2.3. Approvals

2.2.4. Qualifications

2.2.5. Storage Tank Inventory Control

2.2.6. Hose for Firefighting

2.2.7. Notification

2.2.8. Reserved

2.2.9. Inspection and Maintenance

2.2.10. Fire Department Building Access

2.2.1. General

NFC(AE)

6.7.1.1.(4) Inspection, Testing and Maintenance is now...



NFC(AE) 2023

2.2.1.1 Responsibility

2) The owner of a leased *dwelling unit* shall
a) ensure *smoke alarms* within the *dwelling unit* are tested and cleaned prior to *occupancy*, and
b) provide tenants information concerning ongoing *smoke alarm* cleaning, testing and maintenance.

2.2.1.2. Records

NFC(AE)	NFC(AE) 2023
Division C, 2.2.1.2.(3) Records is now...	2.2.1.2.(2) The initial verification, integrated systems testing reports or test reports for each system shall be retained throughout the life of the systems.
Division C, 2.2.1.2.(5) Records is now...	2.2.1.2.(4) Notwithstanding the conditions stated in Sentence (3), no record shall be destroyed within five years of having been prepared and records shall be retained on site.

2.2.1.2. Records

NFC(AE)	NFC(AE) - 2023
4.4.4.1.(5) Inventory Reconciliation is now...	2.2.1.2.(6) Upon request by the authority having jurisdiction, the record referred to in Sentence 4.4.4.1.(4) of Division B shall be the subject of an audit performed in a manner acceptable to the authority having jurisdiction.
4.6.10.4.(1) Records is now...	2.2.1.2.(7) Records acceptable to the authority having jurisdiction of maintenance and inspections of self-service outlets, fuel-dispensing stations and marine fuel-dispensing stations required by Article 2.2.9.1. shall be retained in conformance with this Article .

2.2.1.2. Records cont'd

NFC(AE)



NFC(AE) - 2023

6.1.1.5.(1) Records is now

2.2.1.2.(8) Unless otherwise stated in **Part 6, Division B**, records indicating inspection, testing and maintenance of fire protection equipment shall be on appropriate forms in conformance with **Sentence (9)** and be retained in conformance with **this Article**.

6.1.1.5. Records

2) Appropriate forms required by Sentence (1) are included in

- a) ~~NFPA NY-FPS-93, "Fire Protection Systems: Inspection, Test and Maintenance Manual,"~~
- b) CAN/ULC-S536, "Inspection and Testing of Fire Alarm Systems," or
- c) CAN/ULC-S537, "Verification of Fire Alarm Systems."

2.2.1.2.(9) Appropriate forms required by Sentence (8) and **acceptable to the authority having jurisdiction** are included in

- a) CAN/ULC-S536, "**Standard for** Inspection and Testing of Fire Alarm Systems," or
- b) CAN/ULC-S537, "**Standard for** Verification of Fire Alarm Systems."
- c) **CAN/ULC-S1001, "Standard for Integrated Systems Testing of Fire Protection and Life Safety Systems."**

2.2.1.2. Records cont'd

NFC(AE)

6.1.1.5.(3) Records is now...



NFC(AE) 2023

2.2.1.2.(10) Except as permitted by Sentence (11) or (12), each portable extinguisher shall have a tag securely attached to it showing

- a) the type of extinguisher,
- b) the size of extinguisher,
- c) the serial number of extinguisher,
- d) the date of last annual maintenance,
- e) the date of last recharge,
- f) a five-year monthly inspection and annual maintenance record,
- g) the name of the owner of the extinguisher,
- h) the name, address and telephone number of the service agency,
- i) the certification number of the approved testing agency, and
- j) the printed name and signature of the service person.

2.2.1.2. Records cont'd

NFC(AE)

6.1.1.5.(4) Records is now...



NFC(AE) 2023

2.2.1.2.(11) For portable fire extinguishers, bar coding and other technologies acceptable to the authority having jurisdiction are permitted to be used as a means of record-keeping, provided

- a) an information record in accordance with Sentence (10) is available at the premise where the portable extinguisher is located, and
- b) the tag on the extinguisher contains information indicating
 - i) a five-year monthly inspection record for use by the owner,
 - ii) the name of the owner of the extinguisher,
 - iii) the name, address and telephone number of the service agency,
 - iv) the certification number of an *approved* testing agency, and
 - v) the printed name and signature of the service person

2.2.1.2. Records cont'd

NFC(AE)

19-FCV-023 – Alternative Tags for Outdoor Portable Fire Extinguishers



NFC(AE) 2023

2.2.1.2.(12) Adhesive labels with the information specified in Sentence (10) are permitted to be used for portable fire extinguishers that are rated 40B:C or 80B:C and that are solely used on commercial equipment located outdoors. (See Note A-2.2.1.2.(12).)

A-2.2.1.2.(12) To help alleviate the issue of tags being damaged or destroyed due to weather exposure, companies that have 40B:C or higher that are located outdoors on their commercial equipment may request that their extinguisher servicing company use adhesive labels that meet the requirements of Sentence 2.2.1.2.(10). Adhesive labels can only be utilized on fire extinguishers that are directly subjected to the weather elements. Any extinguisher rated for less than 40B:C or located inside building structures will continue to require a securely attached tag.

More specifically, adhesive labels are to be placed on the “back” of the fire extinguisher only. Labels are never to be placed on the front of a fire extinguisher. The new label shall be affixed to the shell by a heatless process, and any old maintenance labels shall be removed. The labels shall be of the self-destructive type when their removal from a fire extinguisher is attempted. Records shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file or by using an electronic method that provides a permanent record.



2.2.1.2. Records cont'd

NFC(AE)	NFC(AE) 2023
<p>6.1.1.5.(5) Records is now...</p>	<p>2.2.1.2.(13) Service information that is required to be placed monthly or annually on the tag referred to in Sentences (10), (11) and (12) shall be handwritten.</p>
<p>5.6.1.3. Fire Safety Plan 1) Except as required in Sentence (2), prior to the commencement of construction, alteration or demolition operations, a fire safety plan, accepted in writing by the fire department and the <i>authority having jurisdiction</i>.</p>	<p>2.2.1.2.(14) The fire safety plan required for construction and demolition sites in accordance with Article 2.8.1.1. of Division B shall be accepted in writing by the fire department and the authority having jurisdiction.</p>

Division C Changes – Part 2

Subsection 2.2.3. Approvals

2.2.3.1. Storage Tank Systems

NFC(AE)

2.2.3.1.(1) Storage Tank System is now...

A-2.2.3.1.(1) The powers, duties and functions of the Provincial Fire Administrator in Sentence 2.2.3.1.(1) and Subsection 2.2.5. have been delegated by the Minister to the **Petroleum Tank Management Association of Alberta (PTMAA)** in accordance with the Storage Tank System Management Regulation (AR50/2010).

NFC(AE) - 2023

2.2.3.1 Storage Tank Systems

1) Only individuals *approved* by the *Provincial Fire Administrator* are permitted to install, remove, repair or maintain aboveground and *underground storage tank systems*. (See Note A-2.2.3.1.(1).)

A-2.2.3.1.(1) The powers, duties and functions of the Provincial Fire Administrator in Sentence 2.2.3.1.(1) **are delegated to the Safety Codes Council's Administrator of Certification.**

NFC(AE)

2.2.3.1. Storage Tank System

STANDATA – 19-FCI-018 – Certification of Contractors for Storage Tank Systems

NFC(AE) - 2023

2.2.3.1. Storage Tank Systems

2) *Approved* persons are considered qualified to install , remove, repair and maintain aboveground and *underground storage tank systems* when they have received certification from

- a) the Canadian Petroleum Contractors Association (C.P.C.A.),
- b) the Technical Standards and Safety Authority (TSSA),
- c) the Petroleum Management Association of Alberta (PTMAA). (See Note A-2.2.3.1.(2)(c)).

NFC(AE)

2.2.3.1. Storage Tank System

STANDATA – 19-FCI-018 – Certification of Contractors for Storage Tank Systems

NFC(AE) - 2023

2.2.3.1. Storage Tank Systems

3) Any person that feels they have an equivalent certification to the certifications in Sentence (2) above should submit a request to the Safety Codes Council for an equivalency review.

NFC(AE)

2.2.3.1.(2) Storage Tank System is now...

NFC(AE) - 2023

2.2.3.1. Storage Tank Systems

- 4) No person shall install or alter any outside aboveground *storage tank system* referred to in Part 4, unless
- a) required permits or approvals have been obtained from the *authority having jurisdiction*,
 - b) plans, drawings and specifications of the system or equipment have been examined and accepted by the *authority having jurisdiction*, and
 - c) all on-site individual storage tanks do not exceed a capacity of 8 000 L and their aggregate capacity does not exceed 20 000 L.
- (See Note A-2.2.3.1.(4).)

NFC(AE)

2.2.3.1.(3)Storage Tank System is now...

NFC(AE) - 2023

2.2.3.1. Storage Tank Systems

5) Except as permitted by Sentence (4) for outside aboveground *storage tank systems*, no person shall install or alter any storage tank system referred to in Part 4, unless

- a) required permits or approvals have been obtained from the *authority having jurisdiction*,
- b) plans, drawings and specifications of the system or equipment have been examined and accepted by the *authority having jurisdiction*, and
- c) the plans, drawings and specifications referred to in Clause (b) be authenticated by a **registered engineering professional as defined in the NBC(AE)**.

NFC(AE)

2.2.3.1. Storage Tank System

NFC(AE) - 2023

2.2.3.1. Storage Tank Systems

6) *Storage tank systems containing combustible liquids used to supply fuel to equipment installed in conformance with CSA B139 Series, “Installation code for oil-burning equipment,” must comply with Part 4 where the requirements are not included in CSA B139 Series, “Installation code for oil-burning equipment.” (See Note A-2.2.3.1.(6).)*

Division C Changes – Part 2

Subsection 2.2.4. Qualifications

2.2.4.1. Special Fire Suppression Systems

2.2.4.2. Portable Fire Extinguishers

2.2.4.3. Fire Alarm and Voice Communications

2.2.4.4. Sprinkler Systems

2.2.4.5. Commercial Cooking Equipment Exhaust Systems

2.2.4.6. Water-based Fire Protection Systems

2.2.4.7. Emergency Power Systems

2.2.4.8. Integrated Fire Protection and Life Safety Systems

2.2.4.9. Approved Certificate of Training

NFC(AE)

2.2.4.1.(1) Special Fire Suppression Systems is now...

NFC(AE) - 2023

2.2.4.1. Special Fire Suppression Systems
(See Note A-2.2.4.1.)

1) Only qualified persons shall install special fire suppression systems when they have acquired a certificate of training from a manufacturer **and on a specific system from a manufacturer.**

NFC(AE)

NFC(AE) - 2023

2.2.4.1. Special Fire Suppression Systems

2) A qualified individual for the installation of a special fire suppression system is a person who has received

- a) training from a manufacturer, and,
- b) training on each specific system that a manufacturer provides before it can be installed.

NFC(AE)

2.2.4.1.(2) Special Fire Suppression Systems is now...

NFC(AE) - 2023

2.2.4.1. Special Fire Suppression Systems

3) Only qualified persons shall test or perform maintenance on a special fire suppression system when

a) they have acquired an *approved* certificate of training from a public post-secondary educational institution, or

b) they have acquired a certificate of training from a manufacturer **for each of their specific systems.**

NFC(AE)

NFC(AE) - 2023

2.2.4.1. Special Fire Suppression Systems

A-2.2.4.1. Proof of training from the manufacturer is provided via an issued certificate with the following information:

- (a) certificate holder,
- (b) certificate holder company,
- (c) date of certification,
- (d) type of certification including the manufacturer and type of system, and
- (e) expiry date, if applicable.

Typically, certification must be updated following a change of employment or change of manufacturer. It is the responsibility of the certificate holder to contact the manufacturer regarding any changes within their employment.

Currently there is only one approved course at a public post-secondary institution, which is provided by the Southern Alberta Institute of Technology (SAIT). The SAIT program material only covers pre-engineered kitchen suppression systems. Once a person graduates, the expectation is that they gain practical experience while working under the supervision of an experienced qualified person. Persons who have acquired training from SAIT must present a copy of their transcript as proof of certification.

NFC(AE)

2.2.4.2.(1) Portable Fire Extinguishers is now...

NFC(AE) 2023

2.2.4.2. Portable Fire Extinguishers

1) Only qualified persons shall install, test or perform maintenance on portable extinguishers.

(See Note A-2.2.4.2.(1))

A-2.2.4.2.(1) The intent is that all staff engaged in the installation, testing and maintenance of fire extinguishers be qualified.

NFC(AE)

NFC(AE) 2023

3) Monthly inspections required by NFPA 10, “Standard for Portable Fire Extinguishers” may be completed by

- a) the owner,
- b) an employee designated by the owner, or
- c) by a designated representative (e.g. service provider).

(See Note A-2.2.4.2.(3).)

A-2.2.4.2.(3) If the owner is in any doubt about the condition of a fire extinguisher following an inspection, they should contact a certified fire extinguisher servicing company to evaluate the operational integrity of the fire extinguisher.

NFC(AE)

2.2.4.3. Fire Alarm and Voice Communication Systems

- 1) Only qualified persons shall install, test or perform maintenance on fire alarm and voice communication systems when they have acquired an *approved* certificate of training from
 - a) a public post-secondary educational institution, or
 - b) the Canadian Fire Alarm Association (CFAA).(See Note A-2.2.4.3.(1).)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

- 1) Persons are considered qualified in the installation of fire alarm and voice communication systems when they have acquired
 - a) an Alberta journeyperson's electrician certificate on or after September 1, 1991,
 - b) an Alberta journeyperson's electrician certificate prior to September 1, 1991 and have completed a fire alarm course recognized by the *Provincial Fire Administrator*, or
 - c) a Canadian Red Seal journeyperson's electrician certificate and have completed a fire alarm course recognized by the *Provincial Fire Administrator*.(See Note A-2.2.4.3.(1).)

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

A-2.2.4.3.(1) The types of training provided and other provincial legislation may limit the scope of activities a qualified person may perform on such systems.

Fire alarm system verifications are generally the responsibility of a licensed engineering professional. In Alberta, this must be the registered professional who will complete a Schedule C under the NBC(AE).

The NFC(AE) states that a person who has acquired an approved certificate of training from a post-secondary educational institution may also inspect, test and maintain fire alarm and voice communication systems. Prior to the NFC(AE), Alberta Fire Codes in Note A-2.2.4.3.(1) of Division C stated a “Fire Alarm Technician certification issues by the Canadian Fire Alarm Association (CFAA) or the Northern & Southern Institutes of Technology.” This information was not included in the Notes to Division C for the NFC(AE).

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

A-2.2.4.3.(1) cont. Those persons who have Fire Alarm Technician certification from the Northern Institute of Technology & Southern Alberta Institute of Technology are still qualified to inspect, test and maintain fire alarm and voice communication systems until December 31, 2025. To continue to inspect, test and maintain these systems after this date, persons must have to obtain a certificate of training from the CFAA.

Prior to 2000, Alberta Labour issued a “P” ticket number or a personal identification number (PIN) card to certified electricians, manufacturer trained technicians, electronics technicians, electrical engineering technologists, and professional electrical engineers. This P card was to confirm that the individual had successfully passed their training to conduct work on fire alarm systems.

In 2000, the practice of issuing a P ticket or PIN was discontinued. As Alberta Municipal Affairs no longer has the Alberta Labour program in place, the confirmation of a P ticket or PIN can no longer be provided. Anyone still in possession of their laminated P card should note the card is still valid until December 31, 2025.

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

A-2.2.4.3.(1) cont. Cards issued by the Alberta Fire Safety Association (AFSA) will no longer be recognized as proof of certification effective December 31, 2025.

Electrical Contractors Association of Alberta (ECAA)

To obtain proof of certification in lieu of the above-mentioned cards, individuals must contact the Electrical Contractors Association of Alberta (ECAA). There are two options to obtain CFAA designation:

Option 1: Individuals may take a 40-hour upgrade course offered by ECAA, followed by the CFAA theory and practical exam for CFAA registration.

Option 2: Individuals may take the CFAA's Courses 1 and 5 (for equivalent courses, contact the ECAA), followed by the CFAA theory and practical exam for CFAA registration.

The ECAA has implemented a new PIN program. Journeypersons who have lost, misplaced or had their Alberta Labour P ticket or PIN card stolen will need to work with the ECAA to obtain a PIN card if they still wish to carry this card.

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

2) Persons are considered qualified to make operational, inspect, test and maintain fire alarm and voice communication systems and sign applicable documentation when they have acquired

(a) a certificate of training in this area of study from a public post-secondary educational institution, including:

(i) an Alberta journeyperson's electrician certificate on or after September 1, 1991

(ii) an Alberta journeyperson's electrician certificate prior to September 1, 1991 and a fire alarm course recognized by the *Provincial Fire Administrator*, or

(iii) a Canadian Red Seal journeyperson's electrician certificate and a fire alarm course recognized by the *Provincial Fire Administrator*, or

(b) Fire Alarm Technician certification issued by the Canadian Fire Alarm Association (CFAA) and that certification shall be maintained as per CFAA's policy.

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

- 3)** An apprentice electrician may complete all the work a journeyperson electrician is able to, provided
- a) the apprentice is competent to complete the work, and
 - b) the apprentice is under the supervision of a journeyperson electrician in accordance with the Designated Trades and Restricted Activities Regulation.

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

4) A CFAA fire alarm student or trainee may complete all of the work a certified technician is able to, provided

a) the CFAA fire alarm student or trainee is actively enrolled in the CFAA Fire Alarm Technician program, and

b) the CFAA fire alarm student or trainee is competent to complete the work and is supervised onsite by a certified CFAA technician.

(See Note A-2.2.4.3.(4))

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

A-2.2.4.3.(4) A CFAA fire alarm student or trainee is someone who is actively enrolled in the CFAA Fire Alarm Technology Education Program.

NFC(AE)

NFC(AE) - 2023

2.2.4.3. Fire Alarm and Voice Communication Systems

- 5)** A person who assists with the verification, annual inspection, testing and maintenance of a fire alarm system at the control panel shall meet the qualifications outlined in Sentences (1) to (4).
- 6)** The daily and monthly inspections and tests required by CAN/ULC–S536 “Inspection and Testing of Fire Alarm Systems” may be completed by
- a) the owner, or
 - b) the owner’s representative
- 7)** The owner and owner’s representative referred to in Sentence (6) shall receive training by the manufacturer or service provider on the required procedures for their specific fire alarm system.

NFC(AE)

2.2.4.4.(2) Sprinkler Systems is now...

NFC(AE) - 2023

2.2.4.4. Sprinkler Systems

2) Except as required by Sentence (3), persons are only considered qualified in the installation and alteration of automatic fire sprinkler systems **in conformance with** NFPA 13, “**Standard for the** Installation of Sprinkler Systems,” NFPA 13R, “**Standard for the** Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height,” and NFPA 13D, “**Standard for the** Installation of Sprinkler Systems in One- and Two- Family Dwellings and Manufactured Homes,” when they have acquired a **journey person’s** certificate of training as a sprinkler **system installer, recognized in Alberta.**

NFC(AE)

2.2.4.4.(3) Sprinkler Systems is now...

NFC(AE) - 2023

2.2.4.4. Sprinkler Systems

3) Only persons who have acquired a **journeyperson's** certificate of training as a plumber are considered qualified in the installation and alteration of a **residential partial or full flow through fire sprinkler system** in accordance with NFPA 13D, "**Standard for the** Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes."

NFC(AE)

2.2.4.4.(4) Sprinkler Systems is now...

NFC(AE) - 2023

2.2.4.4. Sprinkler Systems

4) Persons are considered qualified in the inspection, testing, maintenance **and repair** of automatic fire sprinkler systems installed in conformance with NFPA 13, “**Standard for the** Installation of Sprinkler Systems,” and NFPA 13R, “**Standard for the** Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height,” in accordance with NFPA 25, “**Standard for the** Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,” when they have acquired a **journeyperson’s** certificate of training as a sprinkler **system installer** recognized in Alberta.

NFC(AE)

NFC(AE) - 2023

2.2.4.4. Sprinkler Systems

5) Persons are considered qualified in the inspection, testing and maintenance of automatic fire sprinkler systems installed in conformance with NFPA 13, “Standard for the Installation of Sprinkler Systems,” and NFPA 13R, “Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies,” in accordance with NFPA 25, “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,” when they have acquired an *approved* certificate of training in the inspection, testing and maintenance of automatic fire sprinkler systems in accordance with NFPA 25, “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.”

NFC(AE)

NFC(AE) - 2023

2.2.4.4. Sprinkler Systems

6) An apprentice sprinkler systems installer may complete all of the work a journeyperson sprinkler systems installer is able to, provided

- a) the apprentice is competent to complete the work, and
- b) the apprentice is under the direct supervision of a journeyperson sprinkler systems installer in accordance with the Designated Trades and Restricted Activities Regulation.

7) An apprentice plumber may complete all of the work a journeyperson plumber is able to, provided

- a) the apprentice is competent to complete the work, and
- b) the apprentice is under the direct supervision of a journeyperson plumber with formal sprinkler system training in accordance with the Designated Trades and Restricted Activities Regulation.

NFC(AE)

2.2.4.5.(1) Commercial Cooking Equipment Exhaust Systems is now...

NFC(AE) - 2023

2.2.4.5. Commercial Cooking Equipment Exhaust Systems

1) **Except as provided in Sentence (2)**, only qualified persons shall perform maintenance on commercial cooking equipment exhaust systems when they have obtained a certificate verifying that they have completed an *approved* course of training in duct-cleaning procedures.

2) A person may clean a commercial cooking equipment exhaust system while under the supervision of a person who has obtained an *approved* certificate of training with the following stipulations:

- a) a certified person must be on site for the duration of the cleaning process,
- b) a certified person may only have up to two persons “in-training” working under them on site, and
- c) the person “in- training” must be in the process of completing their practicum hours and must be a registered student with a recognized training facility.

NFC(AE)

NFC(AE) - 2023

2.2.4.6. Water-Based Fire Protection Systems

1) Persons are considered qualified to install water-based fire protection systems to the applicable standard if they have completed a certificate of training as a journeyperson sprinkler systems installer recognized in Alberta. (See also Note A-6.4.1.1.(1))

2) Persons are considered qualified to inspect, test, maintain and repair water-based fire protection systems in conformance with NFPA 25, “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,” when they have completed a certificate of training as a journeyperson sprinkler systems installer recognized in Alberta.

NFC(AE)

NFC(AE) - 2023

2.2.4.6. Water-Based Fire Protection Systems

3) Persons are considered qualified to inspect, test and maintain water-based fire protection systems in conformance with NFPA 25, “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,” when they have acquired an *approved* certificate of training in the inspection, testing and maintenance of water-based fire protections systems in accordance with NFPA 25, “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.”

4) An apprentice sprinkler systems installer may complete all of the work a journeyperson sprinkler systems installer is able to, provided

- a) the apprentice is competent to complete the work, and
- b) the apprentice is under the direct supervision of a journeyperson sprinkler systems installer in accordance with the Designated Trades and Restricted Activities Regulation.

NFC(AE)

NFC(AE) - 2023

2.2.4.6. Water-Based Fire Protection Systems

5) The *authority having jurisdiction* may accept one or all of the following persons as qualified to inspect, test, maintain and repair hydrants, including private hydrants

a) a person appointed to the position to administer and enforce the provisions of the municipal bylaw pursuant to the Municipal Government Act and its Regulations,

b) a journeyperson sprinkler system installer recognized in Alberta, or

c) a person who has acquired the Water and Wastewater Operators' Certification, as issued through Alberta Environment and Protected Areas, which certifies operators to operate, test and maintain water systems and related appurtenances in Alberta.

(see Note A-2.2.4.6.(5)(c)).

6) The *authority having jurisdiction* may accept a person who has acquired an *approved* certificate of training in the inspection, testing and maintenance of water-based fire protection systems to NFPA 25, "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," to inspect, test, and maintain hydrants, including private hydrants.

NFC(AE)

NFC(AE) - 2023

2.2.4.6. Water-Based Fire Protection Systems

A-2.2.4.6.(5)(c) The certified operator in charge of the water system supplying a hydrant must be aware of and included in any activity affecting the water system to ensure proper operation, testing, maintenance and repair of the hydrant. In a case where the water supply system is privately owned and operated, and not dependent on an Alberta Environment and Protected Areas regulated water system, it is up to the system owner to ensure the proper inspection, testing, maintenance, operation and repair of the system hydrants.

NFC(AE)

NFC(AE) - 2023

2.2.4.7. Emergency Power Systems

1) Persons are considered qualified to perform the inspection, testing and maintenance of emergency power systems installed in conformance with CSA C282, “Emergency electrical power supply for buildings,” when they have received training on the required procedures from a generator manufacturer and be provided with a certificate of training or certification.

2) An owner or owner's representative is considered qualified to perform the weekly and monthly inspection, testing and maintenance of emergency power systems installed in conformance with CSA C282, “Emergency electrical power supply for buildings,” when they have received training on the required procedures from a generator service provider or generator manufacturer.

NFC(AE)

NFC(AE) - 2023

2.2.4.8. Integrated Fire Protection and Life Safety Systems

1) A person qualified to be an integrated testing coordinator shall be a registered engineering professional knowledgeable and experienced in the design, installation and operation of fire protection and life safety systems and in the fire protection and life safety functions of *building* systems. (See Note A-2.2.4.8.(1).)

A-2.2.4.8.(1) A non-registered engineering professional may do the groundwork for the integrated systems testing, provided that the registered engineering professional supervises, approves and officially signs off on that work.

NFC(AE)

NFC(AE) - 2023

2.2.4.9. Approved Certificate of Training

1) Certificates of training or courses provided by public post-secondary educational institutions or other training providers for persons to install, make operational, inspect, test or maintain fire and life safety systems shall be *approved* by the *Provincial Fire Administrator*.

(See Note A-2.2.4.9.(1).)

A-2.2.4.9.(1) An approved certificate of training or an approved course of training at a public post-secondary educational institution or other training provider means that the curriculum has been submitted to and approved by the Provincial Fire Administrator.

To have an education program assessed, educational institutions and other training providers must submit a complete curriculum, including lesson plans with durations, to the Provincial Fire Administrator for review.

The two types of programs that may be delivered by a training provider other than a public-post secondary educational institution are

- courses on the inspection, testing and maintenance of water-based fire protection systems, and
- commercial cooking equipment exhaust cleaning courses.

Division C Changes – Part 2

Subsection 2.2.5. Storage Tank Inventory Control

2.2.5.1. Application

2.2.5.2. General

NFC(AE)

2.2.5.1. Application

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2.2.5.1. Application

2) This Subsection applies to accredited and unaccredited areas in Alberta.

NFC(AE)

2.2.5.2. General

Sentences (1) to (13) have been replaced.

NFC(AE) - 2023

2.2.5.2. General

- 1) No person shall use or fill a *storage tank* unless they verify with the *authority having jurisdiction* that the tank meets the appropriate requirements of that jurisdiction

- 2) No person shall install, remove or abandon a *storage tank* or *storage tank system* before contacting the *authority having jurisdiction* for accredited areas or the ASCA for unaccredited areas to ensure the NFC(AE) and any permit requirements are met.

- 3) Owners of *storage tanks* or *storage tanks systems* shall contact the local *authority having jurisdiction* or the ASCA for the enrolment process regarding the inventory control requirements for maintaining the certification of the *storage tank* or *storage tank system* for that area.

Division C Changes – Part 2

Subsection 2.2.6. Hose for Firefighting

2.2.6.1. Hose for Firefighting

NFC(AE)

Section 6.9. Hose for Firefighting

6.9.1.1. General

1) No person shall sell, offer for sale, purchase, lease or otherwise distribute 65 mm or 38 mm hose couplings or fittings intended for use on firefighting hose or fire hydrants by a municipal fire department or fire brigade, unless the couplings and fittings comply with this Section.

2) Threaded firefighting hose couplings and fittings shall have threads that are

a) 38 mm Straight Iron Pipe Thread (S.I.P.T.) on 38 mm couplings, or

b) 3.15 threads per cm with a major thread diameter between 75.95 mm and 75.69 mm for male threads and 76.45 mm for female threads on 65 mm hose couplings and hydrant connections.

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2.2.6.1. Hose for Firefighting

1) No person shall sell, offer for sale, purchase, lease or otherwise distribute 65 mm or 38 mm hose couplings or fittings intended for use on firefighting hose or fire hydrants by a municipal fire department or fire crew, unless the couplings and fittings comply with this Subsection.

(See Note A-2.2.6.2.(1).)

A-2.2.6.1.(1) Couplings and fittings includes, but are not limited to, hose couplings, hydrant outlets, fire department connections, nozzles and appliances.

2) Threaded firefighting hose couplings and fittings shall have threads that are

a) 38 mm straight iron pipe thread, also known as iron pipe thread (IPT) or National Pipe Straight Hose (NPSH), on 38 mm couplings, or

b) Alberta Mutual Aid (AMA) thread, which has 3.15 threads per cm, with a major thread diameter between 75.95 mm and 75.69 mm for male threads and 76.45 mm for female threads, on 65 mm hose couplings and hydrant connections.

NFC(AE)

Section 6.9. Hose for Firefighting

6.9.1.1.(3) and (4) General is now...

5) All firefighting hose shall be maintained in accordance with NFPA 1962, “Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances.”

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2.2.6.1. Hose for Firefighting cont'd

3) All firefighting hose couplings shall meet the requirements of CAN/ULC-S513, “Standard for Threaded Couplings for 38 mm and 65 mm Fire Hose,” including Appendix A.

4) All firefighting hose with internal lug quick-connect couplings, commonly referred to as Storz couplings, shall be in conformance with CAN/ULC-S543, “Standard for Internal Lug Quick-connect Couplings for Fire Hose.”

5) All firefighting hose shall be listed.

6) All firefighting hose shall be inspected, tested and maintained in accordance with NFPA 1962, “Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances.”

Division C Changes – Part 2

Subsection 2.2.7. Notification

2.2.7.1. Spills and Leaks

2.2.7.2. NFC(AE) Fire Protection Equipment

NFC(AE)

4.1.6.4.(1) Notification is now...

NFC(AE) - 2023

2.2.7.1. Spills and Leaks

1) When a loss of *flammable liquid* or *combustible liquid* occurs from a spill, leak, or as indicated by any of the leak detection measures in Section 4.4.of Division B, the owner shall ensure that

a) appropriate action is taken as required in Sentences 4.1.6.3.(2) and (3) and Sentence 4.4.1.3.(1) of Division B, and

b) if the quantity of *flammable liquid* or *combustible liquid* spilled or leaked exceeds 200 L in aggregate or is sufficient to cause a sheen on nearby surface water,

i) the fire department shall be notified immediately, and

ii) the *authority having jurisdiction* shall be notified in writing within 24 h.

(See Note A-2.2.7.1.(1) to (3).)

NFC(AE)

4.1.6.4.(2) Notification is now...

NFC(AE) - 2023

2.2.8.1. Spills and Leaks cont'd

2) A person shall notify the *authority having jurisdiction* and the fire department if they have knowledge about a leak of *flammable liquid* or *combustible liquid* that

a) is based on analysis or other evidence of *flammable liquid* or *combustible liquid* in a water well, or

b) indicates the presence of free or dissolved *flammable liquid* or *combustible liquid* in soil, groundwater, surface water, sewer lines, utility lines, water supply lines, *basements*, crawl spaces or on the ground's surface.

(See Note A-2.2.7.1.(1) to (3).)

NFC(AE)

4.6.8.5.(1)(h) Duties of Attendants is now...

4.6.10.3.(1) Corrective Action is now...

NFC(AE) - 2023

2.2.8.1. Spills and Leaks cont'd

3) Attendants on duty at *fuel-dispensing stations* shall notify the fire department forthwith in accordance with Sentence (1) when a spill or accident occurs that involves *flammable liquids* or *combustible liquids*. (See Note A-2.2.7.1.(1) to (3).)

4) The operator of a *self-service outlet*, a *fuel-dispensing station* or a *marine fuel-dispensing station* shall ensure that immediate corrective action is taken when a condition is identified that contravenes Sentences 2.2.9.1.(1) and (2).

NFC(AE)

6.1.1.3.(1) Notification is now...

NFC(AE) - 2023

2.2.7.2. “NFC(AE)” Fire Protection Equipment

1) In addition to the requirements of Sentence 6.1.1.3.(1). of Division B, 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.

(See Note A 6.1.1.3.(1). of Division B.)

NFC(AE)

2.8.2.8.(1) and (2) Shutdown of Fire Alarm Systems is now...

NFC(AE) - 2023

2.2.7.2. Fire Protection Equipment cont'd

2) If a fire alarm and detection system, or part thereof, is inoperative for more than 2 h 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.

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).)

NFC(AE)

6.1.1.3.(2) Notification is now...

NFC(AE) - 2023

2.2.7.2. Fire Protection Equipment cont'd

4) If a person who carries out the maintenance of fire protection installations, including but not limited to portable fire extinguishers, fire extinguishing systems, fire alarm systems or fire alarm devices, 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 forthwith notify, in writing, the fire department and the owner or their authorized agent of that notification.

NFC(AE)

6.1.1.3.(3) Notification is now...

NFC(AE) - 2023

2.2.7.2. Fire Protection Equipment cont'd

5) A person involved in the alteration, repair, shutdown or impairment **of a hydrant, which affects its operation, shall ensure that**

- a) the fire department is notified,
- b) the fire department approves the alteration, repair, shutdown or impairment, and
- c) the affected hydrant is identified in a manner acceptable to the fire department.

(See Note A-**2.2.7.2.(5).**)

Division C Changes – Part 2

Subsection 2.2.9. Inspection and Maintenance

2.2.9.1. Self-service Outlets, Fuel-dispensing Stations and Marine Fuel-dispensing Stations

2.2.9.2. Fire Alarm and Voice Communication System Audits

NFC(AE)

4.6.10.1.(1) Inspection is now...

NFC(AE) - 2023

2.2.9.1 Self-service Outlets, Fuel-dispensing stations and Marine Fuel-dispensing Stations

- 1)** Operators of *self-service outlets, fuel-dispensing stations and marine fuel-dispensing stations* shall ensure that a weekly inspection is conducted of
- a) dispensing unit hoses and nozzles to ensure safe operation,
 - b) dispensing unit pumps and fittings to determine if there are any leaks,
 - c) fill boxes and fill pipe areas for product spillage, and
 - d) *storage tank* vents to ensure piping or openings are not blocked or damaged.

NFC(AE)

4.6.10.1.(2) Inspection is now...

NFC(AE) - 2023

2.2.9.1 Self-service Outlets, Fuel-dispensing stations and Marine Fuel-dispensing Stations
cont'd

2) Operators of *self-service outlets, fuel-dispensing stations and marine fuel-dispensing stations* shall ensure that electronic liquid measuring or leak detection equipment is inspected each business day to confirm that the equipment is functioning as intended.

NFC(AE)

4.6.10.2.(1) and (2) Maintenance is now...

NFC(AE) - 2023

2.2.9.1 Self-service Outlets, Fuel-dispensing stations and Marine Fuel-dispensing Stations cont'd

- 3)** Operators of *self-service outlets, fuel-dispensing stations* and *marine fuel-dispensing stations* shall inspect and maintain the cathodic protection systems on underground storage tanks and piping in conformance with
- a) CAN/ULC-S603.1, “External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids,” for sacrificial anode systems, or
 - b) CFA PACE Report 87-1, “Impressed Current Method of Cathodic Protection of Underground Storage Tanks,” Clause 5.5(c) and Part 6.0 for impressed current systems.
- 4)** Impressed current cathodic protection systems shall be supplied with electrical power on a continuous basis and the power supply shall be inspected at least weekly.

NFC(AE)

6.3.1.6.(1) Audit is now...

NFC(AE) - 2023

2.2.9.2.. Fire Alarm and Voice Communication System Audits

1) When an existing fire alarm system has not been subjected to an initial verification as required by CAN/ULC-S524, “**Standard for the** Installation of Fire Alarm Systems,” and described in CAN/ULC-S537, “**Standard for the** Verification of Fire Alarm Systems,” *the authority having jurisdiction* may require the system to be audited in conformance with CAN/ULC-S536, “**Standard for the** Inspection and Testing of Fire Alarm Systems,” unless the *authority having jurisdiction* is satisfied that the system has been maintained and is functioning in a manner acceptable to the *authority having jurisdiction*.

Division C Changes – Part 2

Subsection 2.2.10. Fire Department Building Access

2.2.10.1. Fire Department Building Access

NFC(AE)

2.5.1.3 Fire Department Building Access

1) A *building* that incorporates the fire protection equipment, elevator control or door access outlined in Sentence (2) shall provide a key box constructed, keyed, and located in a manner acceptable to the *authority having jurisdiction* containing a set or sets of keys or devices required to be used in an emergency.

(See Note A 2.5.1.3.(1).)

NFC(AE) - 2023

2.2.10.1. Fire Department Building Access

- 1) A *building* that incorporates any of the features outlined in Sentence (2) shall **be provided with a key box that**
- a) **contains as set of keys or devices required to be used in an emergency, and**
 - b) **is constructed, keyed and located in a manner acceptable to the authority having jurisdiction.**

(See Note A-2.2.10.1.(1).)

A-2.2.10.1.(1). The authority having jurisdiction may accept alternatives to the installation of a key box at buildings containing fire protection equipment, elevator control or door access, as outlined in Sentence 2.2.10.1.(2), where measures have been taken to provide entry to the building on a 24 h basis. Buildings that have on-site security personnel, on-site staff or alternative access provisions acceptable to the authority having jurisdiction meet the requirements of this Sentence.

This Code allows for the access to the key box by fire department personal in an emergency. Any other emergency response access is at the exclusive discretion of the authority having jurisdiction and the owner.

NFC(AE)

2.5.1.3.(2) Fire Department Building Access is now...

NFC(AE) - 2023

2.2.10.1. Fire Department Building Access cont'd

2) A fire department key box shall be installed and provided with keys and devices in conformance with Sentence (1) in a *building* equipped with

...

k) sleep or resting facilities for employees.

NFC(AE)

2.5.1.3(3) to (5) Fire Department Building Access is now...

NFC(AE) - 2023

2.2.10.1. Fire Department Building Access cont'd

3) Keys or devices provided in conformance with Sentence (2) shall be affixed to a key ring or rings and identified with tags indicating their function.

4) If a fire alarm system or sprinkler system is required to transmit a signal to the fire department in conformance with the NBC(AE), a key box shall be installed on the exterior wall of the *building* in proximity to the principal entrance.

5) A key box installed in conformance with Sentence (4) shall contain an entrance door key with a tag affixed to this key in conformance with Sentence (3).

NFC(AE)

2.8.1.3.(1) Keys and Special Devices is now...

7.1.1.4.(2) Maintenance of Fire Emergency Systems is now...

NFC(AE) - 2023

2.2.10.1. Fire Department Building Access cont'd

6) 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 **this Article**.

7) The keys required to recall elevators and to permit independent operation of each elevator shall be kept in the locations required by **Sentence (1)**.

STANDATA

STANDATA that will be NOT be published

- 19-FCB-007 Permitting and inspections of storage tank systems within the province of Alberta
- 19-FCI-003 Storage tank systems inside buildings.
- 19-FCI-008 Qualifications and approvals.
- 19-FCI-011 Fire hose couplings and fittings.
- 19-FCI-012 Sale and use of flying or sky lanterns
- 19-FCI-015 National Fire Code – 2019 Alberta Edition (NFC(AE)) storage tank system inspections and inventory control
- 19-FCI-018 Certification of contractors for storage tank systems
- 19-FCI-020 Firecrackers
- 19-FCV-023 Alternative tags for outdoor portable fire extinguishers
- All variances for remote sites (one variance will be issued for all sites)



Questions?