

Purpose

This guideline has been developed to help improve consistency with the design, installation, education and enforcement of fire alarm and fire suppression systems for new/renovated permit construction involving any type of building.



Code Reference

1. The current National Building Code - Alberta Edition,
 2. CAN/ULC-S524-19, "Installation of Fire Alarm Systems," and
 3. The Electrical Regulations made pursuant to the Safety Codes Act.
- NFPA 13-2019, "Installation of Sprinkler Systems,"
 - NFPA 13R-2019, "Installation of Sprinkler Systems in Low-Rise Residential Occupancies,"
 - NFPA 12-2015, "Carbon Dioxide Extinguishing Systems,"
 - NFPA 16-2015, "Installation of Foam-Water Sprinkler and Foam-Water Spray Systems,"
 - NFPA 17-2017, "Dry Chemical Extinguishing Systems,"
 - NFPA 17A-2017, "Wet Chemical Extinguishing Systems,"
 - NFPA 96-2017, "Ventilation Control and Fire Protection of Commercial Cooking Operations."

Current National Building Code – Alberta Edition

CAN/ULC-S524: 2019 – Installation of Fire Alarm Systems

CAN/ULC-S536 - Standard for Inspection and Testing of Fire Alarm Systems

CAN/ULC-S537:2019 – Verification of Fire Alarm Systems

CAN/ULC-S1001-11-Standard for the Integrated Systems Testing of Fire Protection and Life Safety Systems

STANDATA-23-BCI-011/24-ECI-009/23-FCI-006 – Existing Fire Alarm Systems



Summary

The requirements of this guideline provide clarity towards the options available for ensuring compliance to the current National Building Code – Alberta Edition when installing a fire alarm and fire suppression system.





Interpretation

This guideline provides clarity and direction from Rocky View County on their interpretation of the design and installation of fire alarm and fire suppression systems. Based on the information provided within this guideline, fire alarm and fire suppression systems shall be installed based on the following criteria.

1. Definitions - As per the current National Building Code – Alberta Edition
 - a) *Maintenance* - Maintenance is the removal, replacement, or servicing of devices or equipment found inoperative during an inspection and testing of the FAS. This would include the discovery of an inoperative device at any other time outside of the scheduled mandatory inspections. Maintenance involves removal and replacement of devices “like for like”
 - b) *Installation* - Includes a new install or additions, modifications, and renovations (changes) to an existing installation.
 - c) *Verification* - Verification involves inspection and testing for verifying the FAS conforms to the design, and applicable codes and standards, and performs all its intended functions.

2. Fire Alarm Systems
 - a) Permit Requirements: A building and electrical permit are required for any fire alarm installation or alteration. Maintenance to an existing fire alarm system does not require permits. Replacement of a control panel does not classify as maintenance work even if the exact replacement is available.
 - b) Professional Involvement: Professional involvement is required for any installation or alteration of a fire alarm system. Plans showing full details of the proposed fire alarm system shall be imprinted with a stamp or seal of an electrical Engineer. Stamped plans and Schedules A & B must be submitted with the building permit application.
 - c) Minor Alterations: A minor alteration to an existing system may only require an electrical Engineer’s scope of work letter submitted at the building permit application stage, and a final verification letter when the work is completed. A minor alteration would include adding or relocating up to 10 field devices or auxiliary equipment. Examples include fire detectors, sprinkler system tamper and flow switches, audible/visible signal devices, maglocks, elevator recall, and manual stations. A minor alteration may also include changing or modifying a fire alarm control panel, if no field devices are changed.

3. Fire Suppression Systems
 - a) Permit Requirements: A building permit is required for any installation or alteration of a fire suppression system. Alterations to a fire suppression system includes the installation of new, or relocation of existing sprinkler heads. Maintenance to an existing fire suppression system does not require a building permit.
 - b) Professional Involvement: Professional involvement is required for any installation or alteration of a fire suppression system. Plans showing full details of the proposed fire



suppression system shall be imprinted with a stamp or seal of a mechanical Engineer. Schedules A & B are required at the time of application, and plans must be submitted and approved prior to installation.

- c) Minor Alterations: A minor alteration to an existing fire suppression system may only require a mechanical Engineer's scope of work letter submitted at the building permit application stage, and a final verification letter when the work is completed. A minor alteration involves adding or relocating up to 9 heads.

4. Documentation Prior to Inspection

- a) Verification - In all cases any installation or alteration of a fire alarm or fire suppression system shall be verified and tested by qualified personnel under the direction of the professional Engineer. Verification must be done in accordance with the applicable standards such as NFPA 13, CAN/ULC-S537, the National Building Code Alberta Edition and the Canadian Electrical Code. The forms at the end of this document must be submitted and stamped by a registered professional after the work is completed.
- b) Schedules - With the exception of minor alterations, C-Schedules from the registered professional(s) must be submitted after work is completed. For a minor alteration, a letter must be submitted by an Engineer to ensure the installation was completed as outlined in the original scope of work and meets the applicable codes and standards.
- c) Commissioning / Re-commissioning of Systems – Where a new building is constructed, an addition is completed, or where a renovation takes place within an existing space (where commissioning has previously taken place), which affects the life safety or fire protection systems as they were previously functioning, commissioning, or re-commissioning of the life safety and fire protection systems must be completed. See our online Commissioning guideline for additional details.



Fire Alarm System Verification Form (2023)

_____ on behalf of _____
Name of Company or Person Performing Verification *Name of Building Owner or Designer/Design-Registered Engineering Professional*

has carried out an on-site verification of the Fire Alarm System installed at:

Address of Installation

This verification was carried out in accordance with CAN/ULC-S537, "Verification of Fire Alarm Systems," as required by Sentence 3.2.4.5.(2) of Division B of the National Building Code-2023 Alberta Edition.

_____ hereby confirms that on _____,
Name of Company or Person Performing Verification *Month/Day/Year*

the Fire Alarm System as installed was reviewed for conformance with drawings and specifications originally prepared by: _____
Name of Designer

and subsequently updated to "As-Built" status by: _____
Name of Contractor

The Fire Alarm System was tested on _____ and found to be fully operational in accordance with:
Month/Day/Year

- 1. The National Building Code-2023 Alberta Edition,
- 2. CAN/ULC-S524-19, "Installation of Fire Alarm Systems," and
- 3. The Electrical Regulations made pursuant to the Safety Codes Act.

_____ *Name of Company or Person Performing Verification* _____ *Signature of Person Responsible for Verification*

Note: Modifications of the Fire Alarm System after _____ will invalidate this Verification Certificate.
Month/Day/Year

Signature of Person Assuming Responsibility for Verification



Fire Suppression System Test Form

[Blank] on behalf of [Blank]
Name of Company or Person Performing Test Name of Building Owner or Designer/Design - Registered Engineering Professional

has carried out an on-site test of the Fire Suppression System installed at:
[Blank]
Address of Installation

This test was carried out in accordance with the appropriate NFPA standard noted below, as required by Sentence 3.2.5.12.(1) of Division B of the National Building Code-2023 Alberta Edition.

[Blank] hereby confirms that on [Blank],
Name of Company or Person Performing Test Month/Day/Year

the Fire Suppression System as installed was reviewed for conformance with drawings and specifications originally prepared by: [Blank]
Name of Designer

and subsequently updated to "As-Built" status by: [Blank]
Name of Contractor

The Fire Suppression System was tested on [Blank] and found to be fully operational in accordance with:
Month/Day/Year

- 1. The National Building Code-2023 Alberta Edition, and
2. The appropriate NFPA standard indicated below (check only one):
- [] NFPA 13-2019, "Installation of Sprinkler Systems,"
- [] NFPA 13R-2019, "Installation of Sprinkler Systems in Low-Rise Residential Occupancies,"
- [] NFPA 12-2015, "Carbon Dioxide Extinguishing Systems,"
- [] NFPA 16-2015, "Installation of Foam-Water Sprinkler and Foam-Water Spray Systems,"
- [] NFPA 17-2017, "Dry Chemical Extinguishing Systems,"
- [] NFPA 17A-2017, "Wet Chemical Extinguishing Systems,"
- [] NFPA 96-2017, "Ventilation Control and Fire Protection of Commercial Cooking Operations."

[Blank] [Blank]
Name of Company or Person Performing Test Signature or Person Responsible for Test

Note: Modifications of the Fire Suppression System after [Blank] will invalidate this Testing Certificate.
Month/Day/Year

[Blank]
Signature of Person Assuming Responsibility for Test



Reference

Approval Date

- November 2025

Last Review Date

- November 2025