

## INTEGRATED TESTING COORDINATOR

### PURPOSE

This interpretation is to provide clarification on the expectation for qualifications of an integrated testing coordinator.

### DISCUSSION

The reference to Integrated Fire Protection and Life Safety Systems speaks for itself in the application of the requirements of the National Building Code-2019 Alberta Edition (NBC(AE))

A *registered engineering professional* is required for the following, which include but is not limited to,

- Design fire alarm systems
- due to size and complexity of the project and special safety concerns
- design fire protection systems
- design mechanical life safety systems
- design electrical life safety systems

CAN/ULC-S1001, "Integrated Systems Testing of Fire Protection and Life Safety Systems," makes reference to the Integrated Testing Coordinator being knowledgeable and experienced in the design, installation, and operation of fire protection and life safety system(s), and the fire protection and life safety functions of building systems.

What qualifications should be considered as being knowledgeable and experienced in the applicable Life Safety systems?

### CODE REFERENCES

Division A, Article 1.4.1.2. Defined Terms states:

*Registered engineering professional* means an individual who is authorized to engage in the practice of engineering under the Engineering and Geoscience Professions Act and its Regulations.

Unless stated otherwise, all Code references in this STANDATA are to Division B of the National Building Code-2019 Alberta Edition

Issuance of this STANDATA is authorized by  
the Provincial Building Administrator

[Original Signed]  
Paul Chang

The logo for the province of Alberta, featuring the word "Alberta" in a stylized, cursive font with a small blue square at the end of the word.

Division C, Sentence 2.4.2.1.(9) states:

2.4.2.1. General

- 9) If the size or complexity of a *project* may give rise to special safety concerns, the *authority having jurisdiction* may require
- a) that all or part of the plans and specifications of a *building* be imprinted with a stamp or seal affixed by
    - i) a *registered engineering professional* where *engineering work* is involved,
    - ii) a *registered architectural professional* where *architectural work* is involved, or
    - iii) both a *registered engineering professional* and *registered architectural professional*, and
  - b) that *field reviews* during construction of a *building* be performed by
    - i) a *registered engineering professional* where *engineering work* is involved,
    - ii) a *registered architectural professional* where *architectural work* is involved, or
    - iii) both a *registered engineering professional* and *registered architectural professional*.

Sentence 3.2.9.1.(1) states:

3.2.9. Integrated Fire Protection and Life Safety Systems

3.2.9.1. Testing

- 1) Where fire protection and life safety systems and systems with fire protection and life safety functions are integrated with each other, they shall be tested as a whole in accordance with CAN/ULC-S1001, "Integrated Systems Testing of Fire Protection and Life Safety Systems," to verify that they have been properly integrated. (See Note A-3.2.9.1.(1).)

A-3.2.9.1.(1) Testing of Fire Protection and Life Safety Systems. Building owners should verify 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, "Integrated Systems Testing of Fire Protection and Life Safety Systems," 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 the Code. Clause 6.1.5 of CAN/ULC-S1001 allows the Integrated Testing Coordinator to accept documented evidence of any tests that have been performed on a system as part of its acceptance testing for the purpose of demonstrating compliance with the integrated testing requirements of that standard, so as to avoid duplication of work.

Sentence 9.10.1.2.(1) states:

9.10.1.2. Testing of Integrated Fire Protection and Life Safety Systems

- 1) Where life safety and fire protection systems and systems with fire protection and life safety functions are integrated with each other, they shall be tested as a whole in accordance with CAN/ULC-S1001, "Integrated Systems Testing of Fire Protection and Life Safety Systems," to verify that they have been properly integrated. (See Note A-3.2.9.1.(1).)

CAN/ULC-S1001-11, Article 4.2. states:

4. INTEGRATED SYSTEMS TESTING QUALIFICATIONS

4.2 INTEGRATED TESTING COORDINATOR

- 4.2.1 The integrated testing coordinator shall be knowledgeable and experienced in the design, installation, and operation of fire protection and life safety system(s), and the fire protection and

life safety functions of building systems. Refer to Appendix A 4.2.1.

4.2.2 The integrated testing coordinator shall have knowledge and understanding of:

- A The Codes and Standards that regulate the design and installation of fire protection and life safety system(s);
- B How individual and integrated fire protection and life safety system(s) are designed to operate during normal operating conditions and emergency conditions; and
- C Methods for validating the intended functionality of integrated fire protection and life safety system(s).

4.2.3 The integrated testing coordinator shall have all licenses and certification if required by:

- A Federal, provincial, territorial or other applicable regulations; and/or
- B Contractual obligations.

### **APPLICATION**

Individual or corporations presenting themselves in the position of an “integrated testing coordinator” to perform the duties required for coordinating the Testing of Integrated Fire Protection and Life Safety Systems.

### **INTERPRETATION**

1. 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 system(s), and the fire protection and life safety functions of building systems.

This INTERPRETATION is applicable throughout the province of Alberta.