

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 24-0031

INTERPRETATION

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Interpretation Date: September 16, 2025

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Subject: Sprinkler and Fire Alarm Systems in Row Housing

Keywords: Sprinkler, Fire Alarm, Row Housing

Building Code Reference(s): 9.10.18.2, 3.2.5.12.(4)

Questions:

A 3-storey townhouse (Part 9) is sprinklered and each dwelling unit has an exit directly to the exterior at ground level.

1. If the dwelling units are sprinklered in conformance with NFPA 13D “Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes”, is a fire alarm system required?
2. Does the 9 head limit of Sentence 9.10.18.2.(4) apply to the entire building?

Interpretation:

1. No.

Article 9.10.18.2 requires a fire alarm system to be installed under two conditions, which are:

- Sentence (1) requires a fire alarm system in a building that is required by Part 9 to be sprinklered, with exceptions as stated in Sentences (3) and (4).
- Sentence (2) requires a fire alarm system where, for a residential building, the occupant load exceeds 10 persons (sleeping accommodation) or the building contains more than 3 storeys including basement levels, with an exception as stated in Sentence (5).

These are two different requirements with two different sets of exceptions, and either of Sentences 9.10.18.2.(1) or (2) could require the installation of a fire alarm system.



Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.

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Sentence 9.10.18.2.(1) only requires a fire alarm system in a building that is required by Part 9 to be sprinklered. Since Part 9 does not require any buildings to be sprinklered except care facilities as per Sentence 9.10.2.2.(6), no fire alarm is required in buildings that are sprinklered voluntarily by the owner. However, if the sprinkler system is installed for the purpose of taking advantage of the relaxations such as fire-resistance rating, travel distance or spatial separation, then fire alarm system shall be installed in accordance with Sentence 9.10.18.2.(1).

There are two exceptions to the installation of fire alarm system in buildings that are required to be sprinklered. Sentence 9.10.18.2.(3) states that a fire alarm system need not be installed in a building that is sprinklered in accordance with NFPA 13D. Sentence 9.10.18.2.(5) states that a fire alarm system is not required in a residential occupancy where an exit or public corridor serves not more than 4 suites or where each suite has direct access to an exterior exit facility leading to ground level.

Since the townhouse in question is sprinklered in accordance with NFPA 13D and each unit has an exterior exit at ground level, a fire alarm system is not required.

Since there may be local bylaws that may require mandatory sprinkler systems in Part 9 buildings it is recommended that the AHJ is consulted whether a fire alarm system is required.

2. Yes.

As stated in the response to question 1, the townhouse building in this example does not require a fire alarm system. Sentence 9.10.18.2.(4) is another waiver that allows a fire alarm system to not be installed in a building where a sprinkler system is required and the entire building has fewer than 9 sprinklers conforming to Sentence 3.2.5.12.(4). That Sentence allows the sprinklers to be supplied from the domestic water system. This is intended only for very small installations, where the building has fewer than 9 sprinklers.



Patrick Shek, P.Eng., CP, FEC, Committee Chair

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