



Public Review

Vancouver Building By-law (VBBL)

Proposed change to revise 3.2.4.1.(3)

Topic: Alignment of the Application requirements for Fire Alarm Systems

Code change number: 24-0028

Code reference: Division B, 3.2.4.1.(3)

Description of the proposed change

Vancouver had a long standing waiver from fire alarm requirements for certain projects containing ground oriented dwelling units in certain configurations. It is understood that this was originally introduced along side mandatory sprinkler requirements as a means to reduce the cost on building now required to be sprinklered.

Justification

This proposal seeks to harmonize the fire alarm requirements with that of the BCBC. This proposal may reduce confusion among installers unfamiliar with Unique to Vancouver requirements, and—provide a more consistent level of performance among residential occupancies by eliminating waivers for quadplexes and ground level housing.

This proposal will now require fire alarm in certain housing arrangements, that would not have otherwise required it under prior VBBL requirements, but help reduce risks from a lack of general notification when a sprinkler operate, provides greater reliability due to the electrical supervision that a fire alarm system provides, and provide direct notification to first responder or a dedicated monitoring service.

Proposed VBBL content

Legend

Black Text – 2019 Vancouver Building By-law content

Red Text – Proposed modification to Vancouver Building By-law content

3.2.4.1. Determination of Requirement for a Fire Alarm System

- 1) Except as permitted in Sentences ~~(2) and (3), (5), (6) and (7)~~, a fire alarm system shall be installed in *buildings* in which an automatic sprinkler system is required by this Part.
- 2) *Buildings* in which a sprinkler system is installed in accordance with NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes," need not comply with Sentence (1).
- 3) *Buildings* that contain fewer than 9 sprinklers conforming to Sentence 3.2.5.12.(4) need not comply with Sentence (1).
- 4) Except as permitted by Sentences (5), (6) and 3.2.4.2.(4), a fire alarm system shall be installed in a *building* that is not *sprinklered* throughout and that contains
 - a) a *contained use area*,
 - b) an *impeded egress zone*,
 - c) more than 3 *storeys*, including the *storeys* below the *first storey*,
 - d) a total *occupant load* more than 300, other than in open air seating areas,
 - e) an *occupant load* more than 150 above or below the *first storey*, other than in open air seating areas,
 - f) a school, college, or child care facility, including a daycare facility for children, with an *occupant load* more than 40,
 - g) a licensed beverage establishment or a licensed restaurant, with an *occupant load* more than 150,
 - h) a *low-hazard industrial occupancy* with an *occupant load* more than 75 above or below the *first storey*,
 - i) a *medium-hazard industrial occupancy* with an *occupant load* more than 75 above or below the *first storey*,
 - j) a *residential occupancy* with sleeping accommodation for more than 10 persons,
 - k) a *high-hazard industrial occupancy* with an *occupant load* more than 25, or
 - l) an *occupant load* more than 300 below an open air seating area.

5) A fire alarm system is not required in a *residential occupancy* that is not *sprinklered*, where

a) not more than 4 *suites* share a common *means of egress*, or

b) each *suite* has direct access to an exterior *exit facility* leading to ground level.

6) A fire alarm system is not required in a *storage garage* conforming to Article 3.2.2.92. that is contained in a *building* that is not *sprinklered* provided there are no other *occupancies* in the *building*.