

2006 BC Building Code

Summary of Secondary Suite Requirements

(January 16, 2007)

Convenience consolidation of the BC Building Code

District of Maple Ridge:
Inspection Services Department

Secondary suite means an additional dwelling unit:

- a) having a total floor space of not more than 90 m² in area,
 - b) having a floor space less than 40% of the habitable floor space of the building,
 - c) located within a building of residential occupancy containing only one other dwelling unit, and
 - d) located in and part of a building which is a single real estate entity.
- (See Appendix A-9.36.1.1. pg 746)

Section 9.36. — Secondary Suites

9.36.1. — General

9.36.1.1. — Application

- 1) This Section applies to the construction of a secondary suite and the alterations to an existing building to accommodate a secondary suite. (See Appendix A.)

9.36.1.2. — Construction Requirements

- 1) The construction of a secondary suite or those alterations to an existing building to accommodate a secondary suite shall conform to the requirements in this Part except as provided in this Section. (See Appendix A.)

9.36.2. — Specific Requirements

9.36.2.1. — Heights of Rooms or Spaces (9.5.3.1.)

- 1) The minimum height of rooms or spaces in a secondary suite over the required minimum area as indicated in Table 9.5.3.1. shall be not less than 2.0 m.
- 2) It shall be possible to travel from the required area of one room to the required areas of all other rooms within a secondary suite without reduction of the room height as required in Sentence (1).

9.36.2.2. — Solid Blocking (9.6.8.9.)

- 1) Solid blocking may be omitted for doors described in Sentence 9.6.8.9.(1) where the interior wall finish adjacent the door is in place prior to the construction of a secondary suite.

9.36.2.3. — Exit Stairs (9.8.2.1.)

- 1) Exit stairs within or serving a building which contains a secondary suite shall have a minimum width, measured between wall faces or guards, of not less than 860 mm. (See Appendix A.)

9.36.2.4. — Dimensions of Landings (9.8.6.3.)

- 1) Landings for exterior stairs serving both suites in a building containing a secondary suite need not exceed 900 mm in length.

9.36.2.5. — Handrails and Guards (9.8.7. and 9.8.8.)

- 1) Handrails and guards shall conform to the requirements of Subsections 9.8.7. and 9.8.8. as if serving only one dwelling unit.

- 9.36.2.6. — Means of Egress (9.9.3.)**
- 1) The width of every public corridor and exit corridor that serves a building which contains a secondary suite shall be not less than 860 mm. (See Appendix A.)
- 9.36.2.7. — Fire Separations for Exits (9.9.4.2.)**
- 1) Except as permitted in Sentence (2), every exit other than an exit doorway shall be separated from adjacent floor areas by a fire separation:
 - a) having a fire resistance rating of 45 minutes, or
 - b) having a fire-resistance rating of not less than 30 minutes where the dwelling units are equipped with smoke alarms as referenced in Article 9.36.2.22.
 - 2) A fire resistance rating is not required for a fire separation which separates an exit from adjacent floor areas where the building is sprinklered.
- 9.36.2.8. — Openings Near Unenclosed Exit Stairs and Ramps (9.9.4.4.)**
- 1) Where an unenclosed exterior exit stair or ramp provides the only means of egress from a dwelling unit in a building that contains a secondary suite and is exposed to the hazards of fire from unprotected openings in the exterior wall of another fire compartment, the openings shall be protected in conformance with Articles 9.10.13.5. to 9.10.13.7. (See Appendix A.)
- 9.36.2.9. — Doors in a Means of Egress (9.9.6.4. and 9.9.6.5.)**
- 1) Every exit door or door that opens into or is located within a public corridor or other facility that provides access to exit from a suite shall:
 - a) be not less than 1980 mm high,
 - b) have a clear opening width of not less than 800 mm, and
 - c) be permitted to swing inward.
- 9.36.2.10. — Travel Limit to Exits or Egress Doors (9.9.9.1.(2))**
- 1) In a building which contains a secondary suite, the travel limit from a floor level in a dwelling unit to an exit or egress door may exceed 1 storey provided the floor level within the dwelling unit is served by an openable window conforming to Sentence 9.9.9.1.(2).
- 9.36.2.11. — Shared Egress Facilities (9.9.9.2., 9.9.9.3.(1))**
- 1) Except as provided in Article 9.9.7.3., where an egress door from a dwelling unit opens onto a public corridor or exterior passageway it shall be possible from the location where the egress door opens onto the public corridor or exterior passageway to go in opposite directions to 2 separate exits unless the dwelling unit is served by a second and separate means of egress or an opening window conforming to Sentence 9.9.9.1.(2).
 - 2) Each dwelling unit shall be provided with a second and separate means of egress or an opening window conforming to Sentence 9.9.9.1.(2) where the egress door from either dwelling unit opens onto:
 - a) an exit stairway which serves both suites,
 - b) a public corridor serving both suites and served by a single exit stairway,
 - c) an exterior passageway serving both suites and served by a single exit stairway, or
 - d) a balcony serving both suites and served by a single exit stairway.

- 9.36.2.12. — Exit Signs (9.9.10.)**
1) Exit signs are not required within a building which contains a secondary suite.
- 9.36.2.13. — Structural Fire Resistance (9.10.8.9.)**
1) Table 9.10.8.1., "Minimum Required Fire-Resistance Ratings for Structural Members and Assemblies" does not apply to a building which contains a secondary suite.
- 9.36.2.14. — Combustible Water Pipes (9.10.9.6.(7))**
1) Combustible water distribution piping that has an outside diameter not more than 30 mm is permitted to partly or wholly penetrate fire separations that are required to have a fire-resistance rating without being incorporated in the assembly at the time of testing as required in Sentence 9.10.9.6.(2) provided the piping is sealed in conformance with Sentence 3.1.9.1.(1).
- 9.36.2.15. — Combustible Drain, Waste and Vent Piping (9.10.9.7.)**
1) Combustible drain, waste and vent piping is permitted to be located within or penetrate a fire separation required to have a fire-resistance rating provided:
a) except for the permitted penetration in clause (b), the combustible piping is located within an assembly protected by a membrane of a minimum 12.7 mm gypsum board,
b) the permitted penetration through the gypsum board membrane is limited to a size of the diameter of the penetrating pipe, and
c) the combustible piping does not penetrate the gypsum board protection membrane on the underside of a horizontal fire separation.
2) Combustible drain, waste and vent piping enclosed in an assembly or protected as described in Sentence (1) is permitted on both sides of a fire separation. (See Appendix A.)
- 9.36.2.16. — Separation of Residential Suites (9.10.9.14.)**
1) Dwelling units in a building which contains a secondary suite shall be separated from each other by:
a) a fire separation in conformance with the requirements of Article 9.10.9.14.,
b) a fire separation having a fire-resistance rating of not less than 30 min. where the dwelling units are equipped with smoke alarms in conformance with Article 9.36.2.22., or
c) a fire separation having no required fire resistance rating where the building is sprinklered. (See Appendix A-9.36.2.17.)
- 9.36.2.17. — Separation of Public Corridors (9.10.9.15.)**
1) A public corridor serving a building which contains a secondary suite shall be separated from the suites by:
a) a fire separation in conformance to the requirements of Article 9.10.9.15.,
b) a fire separation having a fire-resistance rating of not less than 30 minutes where the dwelling units are equipped with smoke alarms as indicated in Article 9.36.2.22., or
c) a fire separation having no required fire resistance rating where the building is sprinklered. (See Appendix A.)

9.36.2.18. — Air Ducts and Fire Dampers (9.10.13.13.)

- 1) Where a heating or ventilation duct system serves more than one suite, the system shall be designed and installed to prevent the circulation of smoke upon a signal from a duct-type smoke detector.
- 2) Ducts penetrating fire separations need not be equipped with fire dampers in conformance with Article 3.1.8.9. provided they are noncombustible with all openings in the duct system serving only one fire compartment.
(See Appendix A.)

9.36.2.19. — Exposing Building Face of Houses (9.10.15.)

- 1) Except as required in Article 9.10.15.3., in buildings which contain a secondary suite, the requirements of Article 9.10.15.5. do not apply provided:
 - a) the exposing building face has a fire-resistance rating of not less than 45 min where the limiting distance is less than 1.2 m, and
 - b) where the limiting distance is less than 0.6 m the exposing building face is clad with noncombustible material.
- 2) Window openings in the exposing building face referred to in Sentence (1) shall not be permitted if the limiting distance is less than 1.2 m and shall be limited in conformance with the requirements for unprotected openings in Article 9.10.14.4. where the limiting distance is 1.2 m or greater.

9.36.2.20. — Smoke Alarms (9.10.19.)

- 1) Except as permitted in Sentence (3), an additional smoke alarm of photo-electric type conforming to CAN/ULC-S531 "Standard for Smoke Alarms", shall be installed in each suite.
- 2) Smoke alarms required in Sentence (1) shall be wired so that the activation of the additional alarm in one suite will cause the additional alarm in the other suite to sound.
- 3) An additional interconnected smoke alarm is not required to be installed in each suite provided:
 - a) the fire separations required in Articles 9.36.2.17. and Article 9.36.2.18. have a fire resistance rating of 45 minutes or greater, or
 - b) the building is sprinklered. (See Appendix A.)

9.36.2.21. — Sound Control (9.11.)

- 1) The assemblies separating the residential suites need not comply with the sound control requirements of Subsection 9.11.2. (See Appendix A.)

9.36.2.22. — Attic Space Access (9.19.2.1.)

- 1) An attic space access hatchway not less than 0.32 m² in an area with no dimension less than 545 mm may serve both suites in a building which contains a secondary suite.

9.36.2.23. — Garages and Carports (9.35.)

- 1) Section 9.35. is applicable to garages and carports serving a building which contains a secondary suite.

A-9.36.1.1. — Application

It is intended that Section 9.36. apply to the construction of a secondary suite, whether this construction be part of or an addition to an existing building, or the construction of a new

building that incorporates a secondary suite. This Section may also be used as a standard for assessing an existing additional dwelling unit located in a single family dwelling building (house), but is not intended to be applied as a retroactive code to these existing units.

It is intended that the definition reflects that a secondary suite is an additional dwelling unit of limited size located within a house. Many of the changes in Section 9.36. are premised on the condition of limited size of the secondary suite, which may directly or indirectly relate to issues such as occupant load, travel distance and egress dimensions.

In order for an additional dwelling unit to be considered a secondary suite, the following criteria must apply:

1. There is only one secondary suite permitted in the building.
2. It must be located in a building containing only residential occupancy.
3. The secondary suite is located in, or part of a building containing only one other dwelling unit.
4. The area of the secondary suite cannot exceed 90 m² of finished living area. (This does not include the areas used for common storage, common laundry facilities or common areas used for egress.)
5. The area of the secondary suite cannot exceed 40 % of the total living floor space (area) of the building it is located in. (The living floor area of the building does not include attached storage garages).
6. The secondary suite cannot be subdivided from the building it is part of under the Strata Property Act. This means that both dwelling units are registered under the same title.

A-9.36.1.2. – Construction Requirements

The requirements of Part 9 of the BC Building Code apply to the construction of a secondary suite and the alterations to a building to incorporate a secondary suite, except those specifically referenced in Subsection 9.36.2.

A secondary suite may be constructed in a building which has been in existence for many years and which may not comply with current code requirements. As it may not be feasible to comply with the current code, discretion should be used provided it does not substantially reduce the level of safety intended by the Code.

For example, existing stairs may not comply with current rise and/or run requirements, winders may not have the 150 mm tread at the narrow end, or guards may be a few millimeters lower than now required.

In some cases existing sidelights or windows may not comply with the Code's safety or security requirements. Acceptable safety requirements can be achieved by applying decals, rails or safety films.

Insulation requirements may not comply with the current code; window and door glazing may not be insulated or installed in thermally broken frames.

Fire stops are required to be installed in new additions and in exposed existing locations but it is not the intent to remove existing finishes to either check for the presence of, or to install new fire stops.

Doors required to have a 20 minute fire-protection rating, or to be 45 mm solid core wood, may be mounted in existing door frames which are less than 38 mm in thickness if it would require substantial framing alterations to accommodate a 38 mm thick frame.

It is not the intent to retroactively apply the current Code to all existing features in order to permit the construction of a secondary suite in an existing building.

A-9.36.2.3.(1) — Exit Stairs

Existing internal and external stairs which formerly served one dwelling unit may now serve both the existing dwelling unit and the new secondary suite. It is not the intent to apply all current BC Building Codes exit stair requirements in order to permit the construction of a secondary suite.

A-9.36.2.8. — Means of Egress Dimensions

The additional occupant load created by a secondary suite does not warrant increasing the width of a public corridor, common exit stair or landing used by both dwelling units. The stairs, corridors, and landings formerly serving one dwelling unit should be of adequate size to accommodate the occupant load of both suites.

A-9.36.2.8. — Openings Near Unenclosed Exit Stairs and Ramps

Unprotected door or window openings in other fire compartments adjacent to exit stairs and ramps should be protected from the other suite to provide safe passage to a safe area. Normally such protection as required by Part 9 would extend both vertically and horizontally beyond the adjacent openings. This is considered excessive due to required fire safety measures and the relatively short travel distances in this type of building. The application of current Part 9 requirements would in many cases require the protection of all openings in entire faces of dwelling units which could be very restrictive. Authorities should exercise judgment with regard to deciding which openings are close enough to the exit facility to pose a problem during the early stages of a fire and require appropriate opening protection. Those openings that directly pass the means of egress are required to be protected.

A-9.36.2.15. — Combustible Drain, Waste and Vent Piping

Exposed combustible drain, waste and vent piping which penetrates a fire separation is required to be protected as described. This protection is not required for exposed fixture traps and arms serving fixtures within the suite provided they are not exposed from the underside of a horizontal fire separation. The intent is not to require removal of existing combustible piping which, as a result of the creation of a secondary suite, may now be on both sides of a rated fire separation. Rather, the intent is to protect this piping where it is exposed.

A-9.36.2.16. and 17. — Separation of Residential Suites & Exits

Two options are permitted for the separation of the residential suites required by Article 9.10.9.14. and the separation of suites and public corridors required by Article 9.10.9.15.

One option is to separate the suites with a fire separation having a fire resistance rating of 30 minutes and provide in each suite an additional smoke alarm interconnected with the smoke alarm in the other suite (described in Article 9.36.2.20.). A 30 minute fire resistance rating can be achieved with 12.7 mm (1/2") gypsum board on framing 400 mm (16") o.c. for vertical assemblies, and 12.7 mm Type X or 15.9 mm (5/8") gypsum board on frame floor/ceiling assemblies. This is often typical construction in modern single dwelling houses. This option will provide an equivalent level of life safety as the occupants of the building will be made aware of the hazard by an automatic detection system in the early stages allowing them early evacuation.

The second option is to provide an automatic sprinkler system conforming to a NFPA standard throughout the building (i.e. both suites and common areas). With this provision no fire resistance rating is required, but the suites must still be separated by a fire separation.

Automatic sprinkler systems are a recognized alternative to fire resistance ratings as a sprinkler system should control the fire at its early stage, preventing its propagation.

A-9.36.2.18. – Air Ducts and Fire Dampers

In order to prevent the migration of smoke from one suite to another during a fire, heating or ventilation systems incorporating ducts that serve both suites are permitted only if there is a mechanism to prevent smoke being circulated from one unit to the other. It is preferable for the secondary suite to have its own heating system independent of the rest of the building.

A-9.36.2.20. – Smoke Alarms

This Article requires an interconnected photoelectric smoke alarm in each suite where fire separations having a fire resistance rating of 30 minutes are used. The purpose of these interconnected alarms is to provide early warning to both suites in the event of a fire in one suite. Photoelectric type alarms are required as they are less prone to nuisance false alarms such as can occur during cooking, but careful consideration is still required as to their location.

It is important to note that these alarms are additional to the requirements of Article 9.10.19. and that each suite is still required to be provided with alarms in conformance to Article 9.10.19.

The additional smoke alarm should not be interconnected to the other smoke alarm(s) located within the same suite.

This additional smoke alarm system is not required when the fire resistance ratings required in Article 9.10.9.14. and 9.10.9.15. are not reduced, or when the building is sprinklered.

A-9.36.2.23. – Sound Control

To meet the BC Building Code's level of sound transmission for secondary suites may be difficult and expensive, particularly in an existing building. As there is single ownership of both dwelling units, this requirement is not mandatory but designers are encouraged to take the subject into consideration where feasible.